Subject to Completion
Preliminary Offering Memorandum dated 11 March 2004

Zinifex Limited

(ABN 29 101 657 309)

Offering of 500,000,000 Ordinary Shares

Indicative Price Range: A$2.10 to A$2.70 per Share

This is the initial public offering in Australia of shares in Zinifex Limited (the "Company"), which is a corporation organised under the laws of the State of Victoria, Australia. Pasminco Holdings Limited ABN 87 102 193 395, a wholly owned subsidiary of Pasminco Limited (Subject to Deed of Company Arrangement) ABN 34 004 368 674 ("Pasminco Limited"), as selling shareholder, is offering up to 500 million of our fully paid ordinary shares, less the number of shares granted pursuant to the Employee Gift Offering and shares granted to our Managing Director (the "Shares") for purchase (the "Offering"). The Offering consists of: (i) an offer of Shares to retail investors in Australia (the "Australian Retail Offering") and (ii) a global institutional offer of Shares, which will be offered in the United States to qualified institutional buyers and outside the United States to institutional investors in Australia and the rest of the world (the "Global Institutional Offering"). The Company is making a separate offering to eligible employees in Australia, The Netherlands and the United States (the "Employee Gift Offering").

Our Company has been formed to own and operate certain assets which prior to completion of this Offering have been owned and operated by the Pasminco Limited group of companies. The net proceeds of this Offering will be used by Pasminco Limited to repay certain of its financial creditors and to be applied in the settlement of claims of its creditors pursuant to a number of deeds of company arrangement. See "Voluntary Administration and Restructuring of Pasminco Limited" for further details.

The Joint Lead Managers named below are seeking bids to purchase Shares in the Global Institutional Offering on the terms set out in this Institutional Offering Memorandum. The Joint Lead Managers will seek bids in the United States through their respective U.S. broker-dealer affiliates and elsewhere in the world through their respective non-U.S. broker-dealer affiliates.

Prior to the Offering, there has been no public market for our Shares. We have applied to Australian Stock Exchange Limited ("ASX") for admission of Zinifex Limited to the official list of the ASX and for official quotation of the Shares sold and transferred under this Institutional Offering Memorandum under the symbol "ZFX". Listing is neither automatic nor guaranteed. We expect that trading on the ASX will commence on a conditional and deferred delivery basis on 5 April 2004.

An indicative price range of A$2.10 to A$2.70 per Share has been set to assist investors in the bidding process. The institutional sale price for the Shares (the "Final Price") will be determined by Pasminco Holdings Limited and a pricing committee of the creditors of the Pasminco Limited group of companies that are subject to deeds of company arrangement (the "Pricing Committee") in consultation with the Administrators and representatives of the Joint Lead Managers on the basis of bids received in the Global Institutional Offering. The Final Price may be set above, below or within the indicative price range. Investors in the Australian Retail Offering are required to apply for Shares at A$2.60 per Share (the "Retail Application Price"). The price at which investors in the Australian Retail Offering will purchase Shares will be the lower of the Retail Application Price and a discount of A$0.10 to the Final Price. We expect that delivery of the Shares under the Global Institutional Offering will be made in book-entry form through the facilities of CHESS against payment in immediately available funds in Melbourne, Australia on or about 8 April 2004.

Investing in the Shares involves risks. See "Risk Factors" commencing on page 15 for a discussion of certain risks that you should consider prior to investing in the Shares.

This Institutional Offering Memorandum was lodged with the Australian Securities and Investments Commission ("ASIC") on 11 March 2004. Neither ASIC nor the ASX takes any responsibility for the contents of this document. The fact that the ASX may admit us to the ASX official list and quote any of our Shares is not to be taken in any way as an indication of the merits of our Company or the Offering.

The Shares have not been and will not be registered under the U.S. Securities Act of 1933, as amended (the "Securities Act"), and may be offered or sold only (i) inside the United States to persons reasonably believed to be qualified institutional buyers ("QIBs") in reliance on the exemption from the registration requirements of the Securities Act provided by Rule 144A and (ii) outside the United States to persons other than U.S. persons in offshore transactions (as such terms are defined in Regulation S under the Securities Act) in reliance on Regulation S, and in each case in accordance with any other applicable law. Investors in the United States are hereby notified that the sellers of the Shares may be relying on the exemption from registration provided by Rule 144A.

Joint Lead Managers

Citigroup **Deutsche Bank** **UBS Investment Bank**

The date of this Institutional Offering Memorandum is 2004.

TABLE OF CONTENTS

No dealer, salesperson or other individual has been authorised to give any information or to make any representations not contained in this Institutional Offering Memorandum in connection with the Offering covered by this Institutional Offering Memorandum. If given or made, such information or representations must not be relied upon as having been authorised by Zinifex, Pasminco Holdings Limited, Pasminco Limited or the Joint Lead Managers. This Institutional Offering Memorandum does not constitute an offer to sell, or a solicitation of an offer to buy, the Shares in any jurisdiction where, or to any person to whom, it is unlawful to make such offer or solicitation. Neither the delivery of this Institutional Offering Memorandum nor any sale made hereunder shall, under any circumstances, create any implication that there has not been any change in the facts set forth in this Institutional Offering Memorandum or in the affairs of Zinifex since the date hereof.

In making an investment decision, investors must rely on their examination of the Company and the terms of the Offering, including the merits and risks involved. The contents of this Institutional Offering Memorandum are not to be construed as legal, business or tax advice. Each prospective investor should consult his or her attorney, business adviser and tax adviser as to legal, business or tax advice. The Shares have not been approved, disapproved or recommended by any United States federal or state securities commission or regulatory authority. Furthermore, the foregoing authorities have not confirmed the accuracy or determined the adequacy of this document. Any representation to the contrary is a criminal offence.

The Shares have not been and will not be registered under the Securities Act and subject to certain exceptions may not be offered or sold in the United States or to U.S. persons. Any offer or sale of the Shares within the United States by any dealer (whether or not participating in the Offering), if made within 40 days after the commencement of the Offering, may violate the registration requirements of the Securities Act if such offering or sale is made otherwise than in accordance with Rule 144A under the Securities Act. See "Notice to Investors" and "Plan of Distribution".

No actions have been taken to register or qualify the Shares or the Offering or otherwise to permit a public offering of the Shares in any jurisdiction outside Australia. The Shares may not be offered, sold or delivered, nor may this Institutional Offering Memorandum or any other document in connection with the Shares be distributed to any person in any jurisdiction except in such manner and in such circumstances as will result in compliance with any applicable laws and regulations.

NOTICE TO NEW HAMPSHIRE RESIDENTS

Neither the fact that a registration statement or an application for a licence has been filed under Chapter 421-B of the New Hampshire revised statutes annotated with the State of New Hampshire nor the fact that a security is effectively registered or a person is licensed in the State of New Hampshire constitutes a finding by the Secretary of State of the State of New Hampshire that any document filed under RSA 421-B is true, complete and not misleading. Neither any such fact nor the fact that an exemption or exception is available for a security or a transaction means that the Secretary of State of the State of New Hampshire has passed judgement in any way upon the merits or qualifications of, or recommended or given approval to, any person, security or transaction. It is unlawful to make, or cause to be made, to any prospective purchaser, customer or client any representation inconsistent with the provisions of this paragraph.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Consistent with customary practice in share offerings in Australia, we have prepared financial forecasts for fiscal year 2004 and fiscal year 2005, which are included in this Institutional Offering Memorandum under "Certain Prospective Financial Information for Zinifex". Certain statements under that caption, under the captions "Risk Factors", "Zinc and Lead Industry Overview", "Business", "Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in this Institutional Offering Memorandum constitute forward-looking statements. These statements can be identified by the use of forward-looking terminology such as "may", "will", "should", "expect", "intend", "anticipate", "estimate", "continue", "assume" or "forecast" or the negative thereof or comparable terminology.

These forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance and achievements or industry results, to be materially different from any future results, performances or achievements, or industry results, expressed or implied by such forward-looking statements. Important factors that could cause these differences include those stated in "Risk Factors" as well as: (i) general economic and business conditions in Australia, The Netherlands, the United States and elsewhere, (ii) changes in the A$/US$ and the A$/Euro exchange rates, (iii) changes in the prices of zinc, lead and our other products, (iv) various environmental and operating risks, (v) our ability to recover our estimated reserves and resources and (vi) other factors referenced in this Institutional Offering Memorandum, including those described under "Risk Factors", "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Certain Prospective Financial Information for Zinifex".

Given these uncertainties, prospective purchasers are cautioned not to place undue reliance on the forward-looking statements contained in this Institutional Offering Memorandum and you should not regard the forward-looking statements as a representation or warranty by the Administrators (as defined below), Pasminco Limited, Pasminco Holdings Limited, Zinifex Limited or the directors of Pasminco Limited, Pasminco Holdings Limited or Zinifex Limited or any other person as to the likelihood of achieving the results set out in the statements or that the underlying assumptions used in formulating the statements will in fact be the case. Subject to the continuous disclosure rules of the ASX Listing Rules and any obligation under the Corporations Act 2001 of Australia (the "Australian Corporations Act") to issue a supplementary or replacement Australian Prospectus, we disclaim any responsibility to update these risk factors or publicly announce the results of any revisions to any forward-looking statements contained in this Institutional Offering Memorandum to reflect future developments or events.

CAUTIONARY NOTE REGARDING MARKET INDUSTRY DATA AND RESERVES AND RESOURCES

Unless otherwise indicated, all sources for industry data and statistics are estimates or forecasts contained in or derived from internal or industry sources believed by us to be reliable. Market data used throughout this Institutional Offering Memorandum was obtained from internal company surveys, consultants' reports and industry publications. Consultants' reports and industry publications generally state that the information contained therein has been obtained from sources believed to be reliable, but that the accuracy and completeness of such information is not guaranteed. We have not independently verified this industry or market data. Similarly, internal company surveys, while believed by us to be reliable, have not been verified by any independent sources.

Marketing statistics are inherently predictive and speculative and are not necessarily reflective of actual market conditions. Such statistics are based on market research which itself is based on sampling and subjective judgements by both the researchers and the respondents, including judgements about what types of products and transactions should be included in the relevant market. In addition, the value of comparisons of statistics for different markets is limited by many factors, including that (i) the markets are defined differently, (ii) the underlying information was gathered by different methods and (iii) different assumptions were applied in compiling the data. Also, certain statistics have been compiled and a number of assumptions have been made by us, and while we believe our methods and assumptions are reasonable, our results and assumptions have not been confirmed by any other party. Accordingly, the market statistics included in this Institutional Offering Memorandum should be viewed with caution and no representation or warranty is given by any person as to their accuracy.

Estimates of zinc and lead reserves, resources, recoveries and operating costs are largely dependent on the interpretation of geological data obtained from drill holes and other sampling techniques, and feasibility studies which derive estimates of operating costs based on anticipated tonnage, expected recovery rates, equipment operating costs and other factors. No assurance can be given that the reserves and resources presented in this Institutional Offering Memorandum will be recovered at the quality or yield presented. In addition, investors

should not assume that the resource estimates are capable of being directly reclassified as reserves under the Australasian Code for Reporting of Mineral Resources and Ore Reserves (the "JORC Code" or "JORC"). See "Mineral Reserve and Resource Reporting" for an explanation of the differences between reserves and resources. The inclusion of resource estimates should not be regarded as a representation that these amounts can be economically exploited, particularly inferred resources, and you are cautioned not to place undue reliance on those estimates. Furthermore, as explained in "Mineral Reserve and Resource Reporting", attention is drawn to the difference between reporting regimes for reserve estimates in the United States and in Australia. One of the principal differences between the reporting regimes is the absence in the United States of any provision for reporting of estimates other than proven or probable reserves.

AVAILABLE INFORMATION

We are not, nor do we intend to become, subject to the reporting requirements of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"). We have agreed to furnish, upon the request of any holder or beneficial owner of Shares, such information as is specified in paragraph (d)(4) of Rule 144A under the Securities Act to such holder or beneficial owner or to a prospective purchaser of such Shares who is a QIB, in order to permit compliance by such holder or beneficial owner with Rule 144A in connection with the resale of such Shares unless, at the time of such request, we are subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, or are included in the list of foreign private issuers that claim exemption from the registration requirements of Section 12(g) of the Exchange Act, and therefore are required to furnish the U.S. Securities and Exchange Commission (the "SEC") with certain information pursuant to Rule 12g3-2(b) under the Exchange Act. We have agreed to distribute to our shareholders an annual report containing a description of our operations and our annual audited consolidated financial statements prepared in accordance with generally accepted accounting principles in Australia.

ENFORCEABILITY OF CIVIL LIABILITIES

Zinifex Limited, Pasminco Holdings Limited and Pasminco Limited are Australian public corporations having limited liability under the Australian Corporations Act. All of the directors and executive officers of Zinifex Limited, Pasminco Holdings Limited and Pasminco Limited and certain other parties named herein reside outside the United States and most of our assets are located outside the United States. As a result, it may be difficult for U.S. investors to effect service of process within the United States upon such persons or to enforce against us or such persons in foreign courts judgements predicated upon, among other things, the civil liability provisions of the federal securities laws of the United States. We have been advised by our Australian counsel, Minter Ellison, Melbourne, Australia, that there is doubt as to the enforceability in Australia in original actions or in actions for enforcement of judgements of United States courts, of civil liabilities predicated solely upon federal or state securities laws of the United States.

EXCHANGE RATES AND CERTAIN DEFINED TERMS

In this Institutional Offering Memorandum, unless otherwise specified herein or the context otherwise requires, references to "US$" or "US dollars" are to United States dollars, references to "$", "A$" or "Australian dollars" are to Australian dollars and references to "€" or to "Euros" are to the currency of the European Community. For the convenience of the reader, this Institutional Offering Memorandum contains translations of certain Australian dollar amounts into US dollars at the rate or rates indicated. Unless otherwise specified, translations of Australian dollars into US dollars have been made at the noon buying rate in New York City (the "Noon Buying Rate") for cable transfers in Australian dollars as certified for customs purposes by the Federal Reserve Bank of New York. These translations should not be construed as representations that the Australian dollar amounts actually represent such US dollar amounts or could be converted into US dollars at the rate or rates indicated.

The tables below show the Noon Buying Rates expressed in terms of US$ at the Noon Buying Rate for A$1.00:

- at the latest practicable date before the date of this Institutional Offering Memorandum, being 9 March 2004: A$1.00 = US$0.7635;

- the high and low Noon Buying Rates for six months preceding the date of this Institutional Offering Memorandum;

Month	High	Low
September 2003	0.6810	0.6395
October 2003	0.7077	0.6814
November 2003	0.7238	0.6986
December 2003	0.7520	0.7236
January 2004	0.7805	0.7576
February 2004	0.7979	0.7566

- the high, low, average and period end Noon Buying Rates for the five most recent fiscal years:

Year Ended 30 June	Average Rate [1]	High	Low	At Period End
1999	0.6248	0.6712	0.5550	0.6611
2000	0.6238	0.6703	0.5685	0.5971
2001	0.5372	0.5996	0.4828	0.5100
2002	0.5240	0.5748	0.4841	0.5628
2003	0.5884	0.6729	0.5280	0.6713

[1] The average of the Noon Buying Rates on the last business day of each full month during the period presented.

Certain of our costs are denominated in Euros. The interbank exchange rates for cable transfers of Euros as reported by OANDA Corporation, expressed in Euros per A$1.00, for the periods indicated are set forth below:

- at the latest practicable date before the date of this Institutional Offering Memorandum, being 10 March 2004: A$1.00 = Euro 0.6155;

- the high and low interbank exchange rates for cable transfer of Euros as reported by OANDA Corporation (the "OANDA Euro Rates") for six months preceding the date of this Institutional Offering Memorandum:

Month	High	Low
September 2003	0.5939	0.5837
October 2003	0.6055	0.5841
November 2003	0.6228	0.6044
December 2003	0.6094	0.5918
January 2004	0.6277	0.5982
February 2004	0.6228	0.6064

- the high, low, average and period end OANDA Euro Rates for the five most recent fiscal years:

Year Ended 30 June	Average Rate[1]	High[2]	Low[3]	At Period End
1999	0.5864	0.6410	0.5223	0.6410
2000	0.6283	0.6659	0.5923	0.6333
2001	0.6036	0.6541	0.5428	0.6014
2002	0.5853	0.6149	0.5309	0.5688
2003	0.5578	0.5836	0.5349	0.5835

Source: OANDA Corporation.

(1) The average of the ask prices for each day during the given period.

(2) The highest bid rate for the given period.

(3) The lowest bid rate for the given period.

Australian dollars are convertible into US dollars and Euros at freely floating rates. Under Australian foreign exchange controls, which may change from time to time, payments by us to, or on behalf of, the following payees may only be made with the approval of the Reserve Bank of Australia: certain known supporters of the former Milosevic regime in the Federal Republic of Yugoslavia; the embassy of the Federal Republic of Yugoslavia; the Consulate-General of the Federal Republic of Yugoslavia for transactions greater than A$100,000; and certain specified ministers and senior officials of the Government of Zimbabwe. In addition, as a result of the United Nations Security Council sanctions, we are also prohibited from accepting payments from the Government of Iraq and its senior officials; Al-Qaeda and the Taliban; and specified persons associated with Al-Qaeda and the Taliban, including Usama Bin Laden.

Please note that our environmental consultants, URS Australia Pty Limited ("URS"), did not necessarily use the above exchange rates in preparing certain estimates of environmental costs (as described elsewhere in this Institutional Offering Memorandum), but applied exchange rates provided by the Company. The exchange rates used by URS are summarised in Annex D to this Institutional Offering Memorandum.

For definitions of certain terms used in this Institutional Offering Memorandum, including certain mining terms, see "Annex A – Definitions and Glossary".

References to tonnes are to metric tonnes, each of which equals approximately 2,205 pounds or 1.102 short tonnes. Measures of distance are stated in kilometres, each of which equals approximately 0.62 miles.

Any discrepancies between totals and sums of components in tables contained in this Institutional Offering Memorandum are due to rounding.

Our fiscal year ends on 30 June. Our fiscal year ended 30 June 2003 is referred to in this Institutional Offering Memorandum as "fiscal year 2003", and our other fiscal years are referred to in a similar manner.

Our fiscal half year ends on 31 December. Our fiscal half year ended 31 December 2003 is referred to in this Institutional Offering Memorandum as "fiscal half year 2004", and our other fiscal half years are referred to in a similar manner.

In this Institutional Offering Memorandum, the words "we", "Zinifex" and the "Company" refer to Zinifex Limited and its consolidated entities. Upon completion of the Offering, Zinifex Limited will be the issuer of the Shares and the owner of certain assets previously owned by Pasminco Limited. "Pasminco Limited" refers to Pasminco Limited (subject to deeds of company arrangement) and its consolidated entities and the ultimate holding company of Pasminco Holdings Limited, the selling shareholder of the Shares in this Offering. As explained in detail in this Institutional Offering Memorandum, Pasminco Limited's shares were suspended from

trading on the ASX on 20 September 2001 following the appointment of Voluntary Administrators on 19 September 2001 pursuant to the provisions of the Australian Corporations Act. "Administrators" refers to John Menzies Spark and Peter Damien McCluskey, partners of the firm Ferrier Hodgson (Victoria) and the administrators appointed to administer the affairs of Pasminco Limited pursuant to Section 436A of the Australian Corporations Act and, following the execution by Pasminco Limited and most of its wholly owned Australian subsidiaries of deeds of company arrangements, the administrators of the deeds of company arrangement.

In this Institutional Offering Memorandum, unless the context indicates otherwise, references to Zinifex and its assets and operations relates to the group that will make up the Zinifex Limited group of companies that will be formed upon completion of the Offering. Therefore, words of a nature such as "currently" relate to Zinifex as it will exist upon completion of the Offering.

FINANCIAL STATEMENT PRESENTATION

We prepare and will publish our consolidated financial statements in Australian dollars. Our consolidated financial statements have been and will be prepared in accordance with Australian generally accepted accounting principles ("Australian GAAP"), which vary in certain significant respects from generally accepted accounting principles applicable in the United States ("U.S. GAAP"). See Annex B – "Significant Differences Between Australian GAAP and U.S. GAAP" for a discussion of significant differences between Australian GAAP and U.S. GAAP as they apply to us for the periods presented in this Institutional Offering Memorandum.

The pro forma historical financial information included in this Institutional Offering Memorandum does not purport to be in compliance with Article 11 of Regulation S-X of the Rules and Regulations of the SEC. Under Article 11, pro forma income statements must be presented assuming the transaction had been consummated at the beginning of the fiscal year presented and may only include adjustments which give effect to events that are:

- directly attributable to the transaction;
- expected to have a continuing impact on the entity; and
- factually supportable.

Under Article 11 of Regulation S-X, pro forma adjustments related to the pro forma statement of financial position must be computed assuming the transaction was consummated on the date of the statement of financial position being presented and must include adjustments which give effect to events that are directly attributable to the transaction and factually supportable, regardless of whether they have a continuing impact or are nonrecurring.

A number of the normalisation adjustments made in the pro forma historical financial information included in this Institutional Offering Memorandum would not be permissible under the SEC's Rules and Regulations. Many of the adjustments reflected arise from the belief that the underlying items are non-recurring and that, although required to be recorded in historical financial statements under Australian GAAP, are more appropriately presented in the pro forma historical financial information as "normalised" and therefore eliminated. This would not be permitted under Article 11 of Regulation S-X. Although we believe that those items normalised will themselves be non-recurring (at least at the magnitude previously experienced), there can be no assurance that similar items will not recur or that such item or a similar item will not have an impact on a future year's results of operations or our financial condition.

The group that will make up Zinifex Limited and its controlled entities will be formed upon completion of this Offering. The historical financial information presented in this Institutional Offering Memorandum have been prepared on the basis that Zinifex Limited and its controlled entities had been operated as an independent group for the periods presented. For more information about the formation of Zinifex Limited and its controlled entities and the financial presentation contained in this Institutional Offering Memorandum, you should refer to "Voluntary Administration and Restructuring of Pasminco Limited" and "Selected Pro Forma Historical Financial and Operating Information".

SUMMARY

Overview of Our Company

We are one of the world's largest integrated zinc and lead producers, supplying 6% and 4% of global demand for finished zinc and lead metal, respectively, during fiscal year 2003. We enjoy significant scale in both our mining and smelting operations, being the second largest zinc mining company and the second largest zinc smelting company in the world in terms of tonnes of metal produced in fiscal year 2003. We are also a major producer of lead, being the fifth largest lead mining company and the third largest primary lead smelting and refining company in the world in terms of tonnes of metal produced in fiscal year 2003. Our major products are zinc and lead metal. Zinc is used primarily in steel galvanising and diecasting, and lead is used primarily in the production of lead acid batteries.

We are a global business headquartered in Melbourne, Australia, and our products are distributed to a broad geographic base of users. We have production facilities in Australia, The Netherlands and the United States. More than 80% of our products are distributed outside Australia, particularly in Asia, which has been experiencing significant growth in construction activity and vehicle production. We believe that we have a competitive advantage with our value-added product offerings and our presence in the markets that we serve. One of our principal product strategies is to increase the volume of value-added products we produce, principally diecasting and other zinc alloys that generate higher price premiums than our commodity products.

Our most significant mining operation is the open-cut Century mine in Queensland, Australia, which produces zinc and lead concentrates. Century mine is among the largest and most commercially attractive zinc mines in the world given its well-defined, accessible ore body and low cost of production. Century mine is currently operating at full capacity and, based on our current expectations, we estimate that Century's remaining mine life will be approximately twelve years.

We also operate the Rosebery mine in Tasmania, Australia. Rosebery is a medium-sized underground mine that produces zinc, lead, silver, gold and copper. Rosebery's cash costs are relatively low after we credit by-product revenues. We estimate that Rosebery's remaining mine life will be at least six years based on two years of reserves and our current expectations regarding the future conversion of inferred resources to reserves.

We own and operate two primary smelters in Australia – the Hobart electrolytic zinc smelter and the Port Pirie lead and zinc smelter. We also operate one of Europe's largest and most efficient zinc smelters at Budel in The Netherlands, and an electrolytic zinc smelter in Clarksville, Tennessee in the United States. In addition, we participate in the lead recycling business through a joint venture that operates small secondary smelters in Sydney and Melbourne in Australia.

We are a highly integrated producer, with our Century and Rosebery mines providing a stable and secure source of zinc concentrate feed for our Hobart, Clarksville and Budel smelters and lead concentrate feed for our Port Pirie smelter. Our integrated nature assists us to maintain high smelter utilisation and partially insulates us from periodic shifts in concentrate treatment charge terms between mines and smelters.

We have been formed to own and operate certain assets that were owned and operated by Pasminco Limited prior to completion of this Offering. As part of the restructuring that creates the Zinifex group, certain environmental liabilities (other than liabilities to the government) for events occurring prior to 20 September 2001 affecting companies in the Zinifex group that were subject to deeds of company arrangement, will no longer be the responsibility of Zinifex. We have assessed our environmental liabilities and risks and are proactively managing them. We have provided for our expected environmental compliance costs in our accounts and our assessment of asset carrying values.

We have been established with a conservative funding structure. Upon the completion of this Offering, our debt will be approximately A$180 million, which primarily relates to a loan secured by the assets of the Zinifex group. Our cash position on 1 April 2004 is expected to be A$66 million resulting in net debt of A$114 million.

Business Strengths

Our business results will benefit from rising zinc and lead metal prices.

Zinc and lead prices in US dollars have moved up from their cyclical lows during the last 12 months by approximately 40% and 100%, respectively, although the increases have been substantially less in Australian dollar terms. We believe that the strength of Chinese industrial demand, the recovery in the U.S. economy and US dollar currency weakness have been the primary drivers behind the recent increases in these metal prices. As we currently do not hedge metal prices and currency exchange rates, our earnings and cash flows are highly sensitive to movements in both zinc and lead prices and the A$/US$ exchange rate, with an A$25 per tonne increase in zinc and lead prices generating approximately A$17.2 million and A$3.4 million of additional annual EBITDA (as defined below), respectively. Accordingly, we believe that we are well positioned to benefit from any further increases in zinc and lead prices.

Our management team has delivered significant and broad improvements in the Company's performance.

For the past two and a half years, our management team has been managing all of the assets that will make up the Company following completion of the Offering. During this period, our management team has effectively transformed the performance of these assets and the culture of the people working them to create a significantly improved and sustainable business. This is demonstrated by the substantial improvements in operational efficiency and production output of these assets without additional significant growth in capital investment. Under our management team's leadership, the Company's operations have generated cash during the recent cyclical low of the zinc and lead commodity price cycles during fiscal year 2003.

We have a portfolio of well-positioned assets.

Our asset base consists of operations that are highly leveraged to commodity price movements. The majority of our assets are located in Australia and supply growing industrial markets in the Asia-Pacific region, including China. This region consumes 46% of world zinc demand and is forecast by Brook Hunt to account for 66% of the growth in zinc demand that is forecast over the next five years.

Century is a world class mine, with low costs relative to its competitors.

Our Century mine is the second largest zinc mine in the world, measured both on production and reserves. The cost advantage conferred by its scale places Century in the best 40% of the Brook Hunt C1 industry cash cost curve. Century has generated cash flow at the recent cyclical low of the price cycle, and we expect it will continue to generate positive cash flows. It is our intention to commence an exploration programme in the Century region that seeks to identify additional mineral resources that can utilise Century's existing infrastructure.

Our smelters are among the world's largest, generating significant economies of scale.

Our Hobart and Budel zinc smelters rank sixth and twelfth, respectively, based on global production. This enables these smelters to generate significant economies of scale, which, together with efficient operations, allows them to operate with low unit costs. Both sites are placed in the better 50% of the Brook Hunt industry total cash cost curve. In addition, our Century and Rosebery mines produce a majority of the feedstock for these smelters.

Our Port Pirie smelter is the largest primary lead smelter in the world. It is a complex, multi-metal facility incorporating lead and precious metal refining, zinc and copper-cathode production and silver and gold recovery. This diversity of revenue sources has enabled Port Pirie to generate solid cash flows throughout the recent period of low commodity prices.

We produce high quality, branded products that earn premium margins.

A large portion of our product portfolio consists of zinc alloys, including the Electrolytic Zinc Diecast Alloy ("EZDA") used for diecasting. These zinc alloys generate significant premiums over London Metal Exchange ("LME") prices. Approximately half of Hobart's production consists of high quality alloys that are exported to China, Taiwan and Hong Kong. We primarily compete in markets that offer higher anticipated growth and the greatest price premium for our products.

We sell our Asian export commodity lead and zinc products at the smelter port under an agreement with the global trading company Trafigura B.V. This arrangement allows us to maximise the realised margin on these products while eliminating the need for additional working capital associated with this distribution system. It also allows us to focus our marketing efforts on our higher premium products.

We have an integrated set of mining and smelting assets with valuable linkages.

The total zinc unit production at our mining operations and the zinc unit capacity at our smelting operations are broadly equal. This balance gives our smelters a secure concentrate supply and provides a long-term market for our mines. In addition, our balanced mix of zinc mining and smelting assets provides our Company with a form of natural hedge against movements in treatment charge terms between mines and smelters, as both producers and consumers of concentrates. Furthermore, our Port Pirie smelter plays a unique role in our business, economically extracting zinc and other metals from Hobart's by-product residues.

Our financing is conservative, with low balance sheet gearing.

As at 29 February 2004, our borrowings were A$180.4 million, which are secured by the assets of the Zinifex group. This conservative financial gearing enables our Company to minimise borrowing costs, retain internally generated funds to meet our capital requirements and reduce financial risks during periods of weak metal prices.

We have a suite of attractive growth options that accentuate existing strengths.

We believe that we have attractive organic growth options that will support our competitive strengths and generate attractive investment returns. These options include low cost capacity expansions, opportunities to increase diecast alloy production, reserve extensions and operational productivity improvements focused mostly on increasing metal recoveries. We expect to fund these projects from cash generated by the Company's operations.

We seek excellence in safety, the environment and our relations with the community.

We strive to maintain a safe environment for our workers, minimise our impact on the environment and be welcomed by the communities in which we operate. We believe that these goals support our financial objectives and create access to future business opportunities. Our operations have improved in a number of these areas. We have identified and understand these risks, which are being actively managed. We recognise that community expectations will rise over time, and our performance must match this increase in expectations.

Business Strategy

Strategic Purpose

Our primary strategic purpose is to maximise total shareholder returns. Our focus will be to increase the return on capital that is already invested in the Company and to pursue disciplined growth through investment that delivers returns in excess of our cost of capital.

Business Boundaries

It is currently our intention to continue to focus our business activities on the zinc and lead industries. Our exploration strategy will target base metals, particularly zinc and lead.

We presently hold an integrated set of mining and smelting assets with similar production capacities in both the mining and smelting of zinc. Our strategy is to maintain an integrated position across these two asset classes, albeit with a gradually increasing focus on mining where we expect potential returns to be greater than in smelting.

We believe that most of our Company's prospective economic value lies in our Australian-based mining and smelting assets, which supply the Asia-Pacific region, including China. We intend to concentrate our resources on the high growth major industrial markets of the Asia-Pacific region in the future. Accordingly, we expect that from time to time we will assess our mix of assets and consider the appropriateness of continuing to maintain our non-Australian assets in the group.

We intend to pursue organic growth opportunities within our strategic business boundaries. At present, we do not expect to undertake major acquisitions. The only greenfield development we are now contemplating is the Dugald River deposit, if that resource can be economically developed.

Company Focus

The strategic objectives that we expect to pursue for the purpose of maximising total shareholder returns will be focused on the following aspects of our business.

- **Premium Margin Products:** Our product portfolio has a large proportion of products that realise significant premiums above the LME prices. In most cases, we choose to compete in markets that offer higher anticipated growth and the greatest price premium for our products. We intend to progressively shift our marketing and production to gain an even greater exposure to premium margin opportunities by expanding our diecasting alloy production capacity at Hobart and Budel.

- **Scale Efficiency:** We intend to pursue expansion opportunities initially at our Budel facility to allow us to generate further economies of scale and offer us further exposure to key markets which are either growing or where there is demand for our products.

- **Operations Productivity:** We will continue our ongoing programmes aimed at minimizing unit costs, focusing particularly in respect of energy and labour costs. We also intend to pursue process efficiency initiatives focused on increasing metal recoveries and reducing residue generation. We expect to minimise the working capital employed in our businesses and pursue a disciplined approach to capital investment and resource prioritisation.

- **Commodity Price Leverage:** Our current intention is to operate without any foreign exchange or commodity price hedging in place, to maximise the returns on our assets from a continued improvement in Australian dollar commodity prices.

- **Conservative Gearing:** We intend to maintain a conservative level of financial gearing which will enable us to minimise our borrowing costs, to fund attractive investment opportunities from internally generated cash flow and to help us generate cash flow during periods of weak metal prices.

- **Resource Renewal:** We are re-establishing an exploration and development capability. We will seek to extend the economic life of our existing mines and leverage our existing infrastructure through exploration in the vicinity of our present mine sites. During 2004, we may re-evaluate our future strategy with regard to the development of, acquisition of or exploration for new major resources.

SUMMARY OF THE OFFERING

The brief summary below describes the principal terms of the Offering and is expressly qualified by the more detailed discussion of the terms of the Offering contained elsewhere in this Institutional Offering Memorandum.

Shares Offered	Up to 500 million fully paid ordinary Shares in Zinifex, less the number of Zinifex shares taken up pursuant to the Employee Gift Offering and shares issued by the Company to our Managing Director.
Shares Outstanding	500 million Shares will be issued and outstanding after the Offering, including the number of Zinifex shares issued by the Company under the Employee Gift Offering and to our Managing Director.
Selling Shareholder	Pasminco Holdings Limited, a wholly owned subsidiary of Pasminco Limited, will sell the Shares.
Determination of Final Price	An indicative price range of A$2.10 to A$2.70 per Share has been set to assist institutional investors in the bidding process. The Final Price may be set within, above or below this indicative price range. The Final Price will be approved by the Pricing Committee in consultation with the Administrators and the representatives of the Joint Lead Managers. Investors in the Australian Retail Offering will pay a price per Share that is the lower of the Retail Application Price and a discount of A$0.10 to the Final Price.
Lock-Up	We have agreed to certain restrictions on future offerings or sales of our Shares for a period of 180 days from the date of the closing of the Offering.
Use of Proceeds	We will not receive any of the proceeds of the Offering. The proceeds of the Offering will be used by Pasminco Limited to repay financial debt incurred since the commencement of its voluntary administration and to satisfy or reduce the claims of its creditors pursuant to the deeds of company arrangement executed by Pasminco Limited.
Creditors Participation in Bookbuild	Creditors of Pasminco Limited and its wholly owned Australian subsidiaries that are subject to deeds of company arrangement are entitled to participate in the Offering. Business units of the creditors who are directly responsible for the management of claims against Pasminco Limited ("Deed Creditors") were provided with an initial priority entitlement to Shares ("Initial Priority Entitlement"). This Initial Priority Entitlement was available to Deed Creditors that are not affiliated with the Joint Lead Managers and who lodged an irrevocable bid prior to this Institutional Offering Memorandum being lodged with ASIC. As part of the Initial Priority Entitlement bid process, creditors have bid for, and will receive an allocation of, up to 50 million Shares. In addition, creditors of Pasminco Limited will be able to bid into the Bookbuild. Deed Creditors that (i) have not participated on

	the Pricing Committee and (ii) are not affiliated with a Joint Lead Manager, will be provided with a priority allocation for up to a further 10% of Zinifex's share capital (the "Bookbuild Priority Allocation"). Such Deed Creditors may also be allocated Shares in the Bookbuild in the same manner as any other investor. These Shares would be additional to the Shares available to them under the Bookbuild Priority Allocation and the Initial Priority Entitlement. Creditors will pay the Final Price for their Shares regardless of the manner in which they were allocated such Shares. The total allocation made to any individual Deed Creditor and its affiliates for their own account in (i) the Initial Priority Entitlement, (ii) the Bookbuild Priority Allocation or (iii) the Bookbuild will be limited to a maximum of 10% of the overall issued capital. The Initial Priority Entitlement was, and the Bookbuild Priority Allocation is, available to Deed Creditors only in their capacity as creditors and does not extend to other divisions, such as an asset management division, of those creditors. See "The Offering" and "Risk Factors – The participation of the creditors in the bookbuild for the Offering may affect the pricing of the Offering and the aftermarket trading in the Shares."
Distribution Policy	Zinifex Limited does not currently intend to make any distribution to shareholders in respect of fiscal year 2004 and will consider whether to make a distribution with respect to fiscal year 2005 depending on Zinifex Limited's performance and financial position at such time. The proposed policy of the Zinifex Limited board of directors (the "Board") is to target future distributions to shareholders that take into account the capital and cash requirements of the Zinifex group. Accordingly, the Board's current intention is to aim that over time the Company will make distributions to our shareholders of the majority of our free cash flow after funding of operating, investment and financing activities. Any future determination regarding distributions to shareholders will be at the discretion of the Board and will depend on a range of factors, including the availability of distributable profits, the Company's financial position, taxation considerations, the ongoing capital and cash requirements of Zinifex Limited, and such other factors as the Board considers relevant. No representation is made as to when, in what form or whether Zinifex Limited will make any distribution to shareholders in the future.
Australian Stamp Duty	No Australian stamp duty will be payable by purchasers of Shares in the Offering.

Voting Rights	Shareholders are entitled on a poll to one vote for each Share held. See "Description of the Shares".
Ranking	All of the Shares will rank equally. See "Description of the Shares".
Australian Taxation	The application of Australian income tax law to investors who are not residents of Australia for tax purposes ("Tax Non-Residents") depends on the individual circumstances of the investor and the provisions of any double taxation treaty in force between Australia and the jurisdiction in which the Tax Non-Resident is resident. Therefore, investors should seek their own independent taxation advice. The following comments are based on current taxation law and practice and are intended to apply only to Tax Non-Residents who hold their Shares on capital account. In general, the purchase and sale of Shares by a Tax Non-Resident will only be taxable in Australia if the Shares are capital gains tax ("CGT") shares. The Shares will be CGT shares if the Tax Non-Resident, with associates, has an interest in at least 10% of Zinifex at any time during the five years before it disposes of the Shares. To the extent a dividend received by a Tax Non-Resident on its Shares is franked, the dividend will not be subject to tax in Australia. To the extent that the dividend is unfranked, however, it will be subject to Australian dividend withholding tax at a flat rate of 30%, unless the rate is reduced as a result of an agreement with the country in which the Tax Non-Resident is a resident. For example, a U.S. resident that has a less than 10% interest in Zinifex is subject to a 15% withholding tax. See "Taxation" for a further discussion of certain important taxation considerations for shareholders.
Listing	Application will be made to the ASX for the admission of Zinifex Limited to the official list of the ASX and for official quotation of its Shares on the ASX.
Proposed ASX Symbol	ZFX
Settlement and Quotation	Payment for the Shares sold in the Global Institutional Offering is expected to be on or about 7 April 2004. It is expected that the Shares will be quoted on the ASX on a conditional and deferred settlement basis on or about 5 April 2004.
Risk Factors	Investing in the Shares involves risks. You should carefully consider all of the information set forth in this Institutional Offering Memorandum, and in particular, you should evaluate the specific factors set forth under "Risk Factors" before investing in the Shares.

SUMMARY PRO FORMA HISTORICAL FINANCIAL AND OPERATING INFORMATION

The pro forma historical financial and operating information set forth below should be read in conjunction with, and is qualified in its entirety by reference to, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the audited or reviewed pro forma historical financial information of Zinifex Limited included elsewhere in this Institutional Offering Memorandum.

Cautionary Note About Pro Forma Historical Financial Information

Our pro forma historical financial information is intended for informational purposes only and does not purport to be indicative of the results that we would actually have obtained during the periods presented and is not necessarily indicative of operating results we expect in future periods. Our pro forma historical financial information was prepared in accordance with Australian GAAP, which differs in certain material respects from U.S. GAAP. For a discussion of differences between Australian GAAP and U.S. GAAP that could be significant to our consolidated results of operations and financial condition, see "Annex B – Significant Differences Between Australian GAAP and U.S. GAAP".

The pro forma historical financial information regarding Zinifex that is included in this Institutional Offering Memorandum has been prepared by combining the results of operations and financial position of each of the legal entities and operations that will form part of the Company following the restructuring described in "Voluntary Administration and Restructuring of Pasminco Limited" and which formed part of Pasminco Limited's operations in each of the historical periods. The combined amounts may not correlate to the results of operations and financial position that would have been the case if Zinifex had been an independent company during the periods presented. This is because:

- our ongoing businesses were part of the larger Pasminco Limited group during these periods;
- the historical financial information reflects the capital structure of Zinifex following our restructuring pursuant to deeds of company arrangement and does not purport to represent what our capital structure would have been had we operated independently during these periods;
- our pro forma historical financial information reflect allocations, primarily with respect to corporate and other expenses, for services provided to us by Pasminco Limited. These allocations are based upon estimates and assumptions made by us, and may not necessarily reflect the costs we would have incurred for similar services as an independent company;
- we may have been exposed to different financial and business risks if we had been an independent company rather than as part of Pasminco Limited and the effect of these different risks may not be reflected in our pro forma historical financial information; and
- our business, organisational structures and operations have changed significantly as a result of the voluntary administration, deeds of company arrangement and restructuring process.

Accordingly, the pro forma historical financial information included in this Institutional Offering Memorandum is not necessarily indicative of our future financial position or results of operations. Investors should carefully consider the normalisation adjustments described below.

Also for these reasons, we do not believe that a pro forma statement of cash flow would be useful to investors and therefore such a statement has not been provided. However, we have prepared a forecast of cash flows for fiscal year 2005. See "Certain Prospective Financial Information for Zinifex."

Basis of Preparation and Presentation

Set forth below is a summary of:

- pro forma historical consolidated EBIT for fiscal years 2001, 2002 and 2003 and fiscal half years 2003 and 2004, including normalisation adjustments;
- a pro forma statement of financial position as at 31 December 2003; and
- summary operating data.

Our pro forma historical financial information has been normalised from the pro forma historical financial information of Pasminco Limited to reflect our assets and operations after giving effect to certain transactions that occurred prior to the restructuring, transactions contemplated by the deeds of company arrangement and other adjustments. This pro forma historical financial information is intended for informational purposes only and does not purport to be indicative of the results that we would actually have obtained during the periods presented and is not necessarily indicative of operating results expected in future periods. See "Selected Pro Forma Historical Financial Information" and "Pro Forma Historical Financial Information" for a description of these normalisation adjustments. Our pro forma historical financial information included in this Institutional Offering Memorandum does not purport to be in compliance with Article 11 of Regulation S-X of the Rules and Regulations of the SEC. See "Financial Statement Presentation".

Depreciation and amortisation expense disclosed in the pro forma historical consolidated EBIT represents the actual depreciation and amortisation reflected in the financial statements of the acquired entities adjusted for the application of consistent accounting policies and discontinued operations. Historical depreciation and amortisation has not been adjusted to reflect adjustments to the value of non-current assets arising as a consequence of our acquisition of the entity or assets in the restructuring process or asset write-downs during the historical periods presented relating to assets in the companies that will make up Zinifex following the Offering.

Our pro forma historical financial information has been provided only to the EBIT level. The entities and assets that formed Pasminco Limited operated under substantially different corporate structures, with different gearing, treasury, accounting policies and tax profiles.

Our independent accountant has reported on the pro forma historical financial information in the Independent Accountant's Report beginning on page F-2.

SUMMARY PRO FORMA HISTORICAL FINANCIAL INFORMATION

Set out in the table below is a summary of our pro forma historical EBIT for fiscal years 2001, 2002 and 2003 and fiscal half years 2003 and 2004.

	Fiscal Year			Fiscal Half Year	
	2001	2002	2003	2003	2004
			(in A$ millions)		
Consolidated					
Revenue:					
Sales revenue	1,865.1	1,835.4	1,622.4	825.7	775.9
Other revenue[1]	17.3	3.8	1.7	4.4	3.3
Total revenue	1,882.4	1,839.2	1,624.1	830.1	779.2
Operating Costs:					
Changes in inventories	(10.0)	22.6	(36.0)	(12.5)	(4.0)
Raw materials and consumables	(591.8)	(734.8)	(604.7)	(283.5)	(268.7)
Freight expenses	(162.2)	(158.3)	(156.2)	(79.9)	(71.3)
Energy expenses	(190.5)	(189.6)	(216.9)	(104.1)	(107.0)
Employee benefits expenses	(230.8)	(228.3)	(237.9)	(128.5)	(113.7)
Contracting and consulting expenses	(113.2)	(160.9)	(149.6)	(67.8)	(49.0)
Restructuring expenses	(34.2)	7.0	4.0	—	—
Other expenses from ordinary activities	(79.3)	(98.9)	(47.6)	(22.8)	(34.5)
Total operating costs	(1,412.0)	(1,541.2)	(1,444.9)	(699.1)	(648.2)
EBITDA[2]	470.4	298.0	179.2	131.0	131.0
Depreciation and Amortisation[3]	(270.2)	(233.0)	(223.0)	(110.8)	(119.2)
EBIT[4]	200.2	65.0	(43.8)	20.2	11.8
Segment Information					
Sales Revenue by site					
Century	427.6	373.5	416.7	233.0	238.5
Rosebery	112.3	99.0	98.3	52.9	56.0
Hobart	477.0	475.5	402.2	203.4	196.2
Budel	488.0	349.1	337.8	167.8	177.5
Clarksville	270.3	207.5	181.9	93.0	78.2
Port Pirie	401.7	474.0	464.2	235.9	216.9
ARA	16.4	17.7	16.0	7.8	8.4
Corporate / Other[5]	1,037.7	231.1	5.7	2.6	6.2
Inter company eliminations[5]	(1,365.9)	(392.0)	(300.4)	(170.7)	(202.0)
Total Sales Revenue	1,865.1	1,835.4	1,622.4	825.7	775.9
EBITDA by site					
Century	213.8	172.6	134.5	84.2	121.0
Rosebery	47.5	25.2	30.6	17.7	24.4
Hobart	107.4	82.9	28.1	28.9	(0.8)
Budel	89.8	36.3	28.1	17.5	18.8
Clarksville	29.7	7.5	(3.8)	1.2	(2.9)
Port Pirie	47.3	51.8	21.4	12.5	10.3
ARA	4.6	4.7	1.7	1.1	1.5
Corporate / Other	(88.6)	(83.7)	(59.8)	(25.5)	(25.1)
Inter company eliminations	18.9	0.7	(1.6)	(6.6)	(16.2)
Total EBITDA	470.4	298.0	179.2	131.0	131.0

	Fiscal Year			Fiscal Half Year	
	2001	2002	2003	2003	2004
EBIT by site					
Century	56.1	33.0	(9.1)	12.6	38.1
Rosebery	29.8	4.4	10.2	7.6	12.5
Hobart	80.8	56.4	6.9	18.0	(11.4)
Budel	74.5	20.8	11.9	9.5	11.4
Clarksville	10.0	4.8	(6.9)	(0.1)	(3.1)
Port Pirie	25.3	26.7	4.1	4.1	4.7
ARA	4.3	4.4	1.4	1.0	1.3
Corporate / Other	(99.5)	(86.2)	(60.7)	(25.9)	(25.5)
Inter company eliminations	18.9	0.7	(1.6)	(6.6)	(16.2)
Total EBIT	200.2	65.0	(43.8)	20.2	11.8

(1) Other revenue includes proceeds from sales of non-current assets, insurance recoveries and miscellaneous other revenues.

(2) EBITDA means profit from ordinary activities before borrowing costs, income tax expense and significant items excluding interest income and after adding back depreciation and amortisation. We believe that EBITDA provides useful information regarding our company, but it should not be considered as an indication of, or alternative to, operating or net profit as an indicator of operating performance or as an alternative to cash flows from operating activities as a measure of liquidity, in each case determined in accordance with Australian GAAP. EBITDA is included for convenience only and may not be comparable to similarly titled measures reported by other companies.

(3) Depreciation and amortisation in the pro forma historical financial information represents the actual depreciation and amortisation reflected in the financial statements of the entities we acquired, adjusted for the application of consistent accounting policies and discontinued operations. Historical depreciation and amortisation has not been adjusted to reflect adjustment to the value of non-current assets arising as a consequence of our acquisition of the entity or assets or asset write-downs during the historical periods presented relating to assets in the companies that will make up the Zinifex group following the Offering. See "Pro Forma Historical Financial Information" for a description of historical depreciation and amortisation.

(4) EBIT means profit from ordinary activities before borrowing costs, income tax expense and significant items excluding interest income and after the normalisation adjustments. We believe that EBIT provides useful information regarding our company, but it should not be considered as an indication of, or alternative to, operating or net profit as an indicator of operating performance or as an alternative to cash flows from operating activities as a measure of liquidity, in each case determined in accordance with Australian GAAP. EBIT is included for convenience only and may not be comparable to similarly titled measures reported by other entities.

(5) Corporate revenue includes the business activities of Pasminco Metals Pty Ltd, which in fiscal year 2001 and for part of fiscal year 2002 acted as a trading company acquiring metals from the Australian smelting sites and then selling zinc, lead and other metals to customers. This activity ceased in October 2001. Sales revenue includes revenue from the shipment of acid on behalf of an external party.

SUMMARY PRO FORMA STATEMENT OF FINANCIAL POSITION

Our pro forma consolidated statement of financial position as at 31 December 2003 has been prepared as if the transactions contemplated by the deeds of company arrangement had occurred at that date and also assumes the capital and debt structure following the Offering is in place at that date.

	As at 31 December 2003 (in A$ millions)
Current Assets:	
Cash assets[1]	48.8
Receivables	167.2
Inventories	273.2
Other	17.0
Total current assets	506.2
Non-Current Assets:	
Receivables	11.2
Property, plant and equipment	1,561.8
Other	7.4
Total non-current assets	1,580.4
Total Assets	2,086.6
Current Liabilities:	
Payables	108.5
Interest-bearing liabilities[2]	30.7
Provisions	57.3
Other	7.7
Total current liabilities	204.2
Non-Current Liabilities:	
Payables	0.4
Interest-bearing liabilities[2]	160.3
Deferred tax liabilities	245.0
Provisions	237.1
Total non-current liabilities	642.8
Total Liabilities	847.0
Net Assets	1,239.6
Contributed Equity	1,239.6

(1) Cash assets as at 1 April 2004 are expected to be A$66.0 million. See "Certain Prospective Financial Information for Zinifex – Prospective Cash Flow Statement".

(2) Total current and non-current interest-bearing liabilities as at 1 April 2004 are expected to be A$180.0 million.

The adjustments that were applied to the historical statement of financial position of Pasminco Limited to generate the pro forma statement of financial position are set out in the pro forma historical financial information included in this Institutional Offering Memorandum.

SUMMARY OPERATING DATA

The following table sets out certain operating data underlying our historical financial and operating information for fiscal years 2001, 2002 and 2003, and fiscal half years 2003 and 2004.

	Fiscal Year			Fiscal Half Year	
	2001	2002	2003	2003	2004
Mining production:					
Ore mined (tonnes)	5,515,915	5,612,447	5,973,608	3,037,798	3,015,826
Contained zinc in concentrate (tonnes)	489,560	548,831	601,444	307,374	287,823
Contained lead in concentrate (tonnes)	80,293	112,275	91,374	43,025	53,058
Smelter production:					
Zinc metal (tonnes)	599,217	595,759	618,784	309,972	315,257
Lead metal (tonnes)	232,456	291,961	285,627	137,356	140,315
Silver metal (kilograms)	364,273	431,626	461,600	238,360	201,910
Net Sales:					
Net zinc metal sold (tonnes)[1]	493,782	549,921	617,160	317,392	295,326
Net lead metal sold (tonnes)[1]	80,271	121,669	130,802	54,721	75,471
Average realised zinc price on net zinc metal sold (US$/tonne)[2]	1,038	830	779	764	867
Average LME zinc price (US$/tonne)	1,051	792	774	769	875
Average zinc realisation and selling costs (US$/tonne)	53	49	57	58	57
Average net margin on zinc metal sales (US$/tonne)[3]	548	470	421	420	447
Average realised lead price on net lead metal sold (US$/tonne)[2]	527	529	455	393	546
Average LME lead price (US$/tonne)	443	474	445	432	572
Average lead realisation and selling costs (US$/tonne)	65	67	68	76	69
Average net margin on lead metal sales (US$/tonne)[3]	224	219	219	201	246
Average treatment charge on zinc concentrates sold (US$/tonne of concentrate)[4]	135	127	104	111	119
Average treatment charge on zinc concentrates purchased (US$/tonne of concentrate)[4]	146	142	127	90	123
Net zinc concentrates purchased/(sold) (tonnes)[6]	274,341	158,113	67,636	(13,765)	82,899
Average treatment charge on lead concentrates sold (US$/tonne of concentrate)[4][5]	190	159	80	—	124
Average treatment charge on lead concentrates purchased (US$/tonne of concentrate)[4]	127	126	115	117	139
Net lead concentrates purchased (tonnes)[6]	230,229	243,364	275,521	151,388	111,052
Average realised US$/A$ exchange rate on net US dollar revenue	0.5342	0.5523	0.6173	0.5376	0.6833
Net US dollar exposure (US$ millions)[7]	550	508	493	232	244
Average realised A$/Euro exchange rate on net Euro costs	0.6001	0.5897	0.6051	0.5640	0.5960
Net Euro exposure (Euro millions)[8]	89	77	75	33	32

	Fiscal Year			Fiscal Half Year	
	2001	2002	2003	2003	2004
Operating Costs:					
Cash conversion costs per tonne of contained metal produced:[9]					
Mining (A$/tonne)	564	514	551	552	593
Smelting (A$/tonne)	545	532	529	539	497
Total cash conversion costs (A$/tonne)	553	524	538	545	538
Total conversion costs per tonne of contained metal produced:[10]					
Mining (A$/tonne)	680	617	636	633	679
Smelting (A$/tonne)	645	611	592	604	549
Total conversion costs (A$/tonne)	659	613	611	616	605

(1) Includes finished metal sales and payable metal in concentrate sales to third parties, less payable metal in third-party concentrate purchases.

(2) Represents the average LME metal price achieved on third-party metal sales and purchases, excluding premiums.

(3) Represents the net revenue less cost of raw materials purchased, per tonne of metal sold to the external market.

(4) Represents average total treatment charge/income, including price escalator/de-escalator, per tonne of concentrate sold and purchased.

(5) No external lead sales were made during fiscal half year 2003.

(6) Represents third-party concentrate sales less third-party concentrate purchases.

(7) Represents third-party US$ denominated revenues less third-party US$ denominated costs.

(8) Represents third-party Euro denominated revenues less third-party Euro denominated costs.

(9) Excludes selling, general and administrative, debt service, depreciation, depletion and amortisation (other than mine development costs).

(10) Excludes selling, general and administrative and debt service.

RISK FACTORS

The following risk factors, both specific to Zinifex and this Offering and of a more general nature, may affect the future operating and financial performance of Zinifex and the value of an investment in Zinifex Limited. You should carefully consider the following risk factors, as well as the other information contained in this Institutional Offering Memorandum before you make an investment decision. These risks and uncertainties are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently believe to be immaterial, may also affect our business operations.

Our business is largely dependent on commodity prices, which are cyclical and volatile.

Our financial results are sensitive to the market prices of zinc and lead, which are cyclical and volatile. Approximately 69% of our fiscal year 2003 revenues were derived from sales of zinc metal and concentrate, a further 18% of our fiscal year 2003 revenues were derived from the sale of lead metal and concentrate and the remainder was derived from the sale of other products. Absent offsetting factors, significant and sustained adverse movements in these metal prices will have a material impact on our ongoing financial performance. In addition, we have not entered into transactions that seek to hedge or mitigate our exposure to movements in these metal prices, and we do not currently intend to enter into such transactions in the future, other than potentially short-term hedging transactions to cover timing risk between third-party concentrate purchases and sales of metal and to cover our exposure on fixed-price forward sales of metal to customers.

Zinc prices have historically been subject to wide fluctuations in response to market forces. The historical long-term trend of zinc prices has been downwards in real terms, with periods of significant increases above and decreases below this long-term trend. Lead prices have also historically been subject to volatility and an overall long-term downward trend in real terms.

The cyclicality and volatility of zinc and lead prices have been driven in part by the cyclical activity in the construction and automotive industries, which are the primary users of zinc and lead. The level of activity in these industries is highly sensitive to a number of factors, such as industrial production. For a discussion of the zinc and lead industries, movements in prices and demand factors, see "Zinc and Lead Industry Overview".

Prior to fiscal year 2003, declines in the prices of zinc and lead had a serious impact on the profitability of our zinc and lead operations. While these metal prices have trended upward recently, a sustained reversal of these recent trends can be expected to have a material adverse effect on our financial condition and results of operations going forward, particularly since many of our costs are fixed and we are not able to reduce costs in proportion to cyclical downturns in zinc and lead prices. In addition, as a large component of our operating costs are in Australia dollars, the Australian dollar price of zinc and lead has more of an impact on our financial performance than the US dollar price of these commodities.

Our business is exposed to the effects of exchange rate fluctuations.

Our assets, earnings and cash flows are influenced by movements in exchange rates of other currencies against the Australian dollar, particularly movements in the US dollar and, to a lesser extent, the Euro. During the fiscal half year 2004, the Australian dollar has appreciated significantly compared to the US dollar. Because our financial statements and the majority of our costs are in Australian dollars, appreciation of the Australian dollar against the US dollar without offsetting improvement in US dollar denominated zinc and lead metal prices, could adversely affect our profitability and financial position. In addition, our operating costs in The Netherlands are mostly denominated in Euros and therefore, a significant appreciation of the Euro against the Australian dollar for a sustained period can also adversely affect our profitability and financial position.

We have no currency hedging in place, and we do not currently intend to enter into currency hedging transactions in the future. Because exchange rates are volatile and unpredictable, we are exposed to significant uncertainty in our cash flows and earnings. See "Exchange Rates and Certain Defined Terms" for further information on historical exchange rate movements.

We may be unable to generate sufficient operating earnings or raise additional capital to meet our ongoing operating or capital expenditure requirements.

Our operating cash flows may not be sufficient to sustain our operations, and we may from time to time be required to draw down on our working capital facility. To the extent that our operating cash flows and our working capital facility are unable to meet our requirements for ongoing operations and essential capital expenditure, we may need to seek to fund these requirements through asset divestitures, further share or debt issues or bank debt. Our ability to raise further equity or debt or to divest some of our assets and the terms upon which such transactions are made are uncertain. We have agreed not to issue new equity securities for a period of 180 days after the Offering without the consent of the Joint Lead Managers, see "Plan of Distribution". We may not be able to generate sufficient operating earnings to sustain our operations or to obtain additional capital to fund working capital needs if required in a timely manner or on acceptable terms. Furthermore, the terms and amount of any additional equity raised may result in dilution of shareholders' interests, depending on the form that the equity raising may take. In these circumstances, if we are unable to obtain additional financing on acceptable terms or at all, our financial condition and our ability to continue operating may be adversely affected.

We are being formed from the restructuring of Pasminco Limited out of its voluntary and deed administration and may be subject to risks associated with or flowing from the restructuring.

Immediately before the successful completion of the Offering, Pasminco Limited and its group companies will be divided into the Zinifex group of companies, of which Zinifex Limited will be the parent company, and a residual group consisting of entities and operations that will not be part of our business going forward. The restructuring involves a set of agreements and arrangements to create both groups. There is a risk that certain elements of the restructuring will not be completed in the manner intended or that certain claims and liabilities might arise from the restructuring or that certain claims and liabilities intended to be released under the restructuring may not be released. For further information regarding the voluntary administration and restructuring, and our remaining liabilities, refer to "Voluntary Administration and Restructuring of Pasminco Limited".

We are exposed to a number of operating risks.

The business of mining and refining zinc and lead is subject to many risks and hazards, including industrial accidents, mine collapse or cave-ins, periodic interruptions due to inclement or hazardous weather conditions, power interruption, critical equipment failure, fires, flooding and unusual or unexpected geological or mining conditions. Such risks could result in damage to our mines and smelters, personal injury, environmental damage, delays in mining or metal production, monetary losses and possible legal liability. In addition, we are dependent on a pipeline, railways and shipping to transport our ore and concentrate, and any disruption to this transportation could have a material adverse effect on our operations.

We are also exposed to movements in the prices charged by external suppliers, including those who supply inputs to our production, such as electricity, other energy providers and sea freight and transport service providers which are critical to our business, as well as movements in wages, royalties, taxes and other governmental charges relating to our mining and smelting operations. A significant increase in one or more of these cost items for a sustained period could have an adverse effect on our financial performance. In addition, unforeseen adverse changes in quality or reductions in the quantity of supplies provided to us by our external suppliers may also adversely affect our operations significantly.

Our operations are subject to stringent environmental laws and regulations which could expose us to significant increased compliance costs and litigation relating to environmental and health issues.

Due to the hazardous nature of zinc and lead mining and smelting processes, and the associated by-products, greenhouse gases, residues and tailings generated from these processes, all of our operations are subject to stringent environmental and health laws and regulations. Many of our sites have been operating in their current capacity for long periods of time and at times when environmental and health laws and regulations were not as stringent as they

are today. As a result, a number of our sites have hazardous substances present and produce other by-products, greenhouse gases, residues and tailings which are required to be treated, disposed or handled in accordance with the standards and procedures contained in current environmental and health laws and regulations.

We are working with environmental authorities to review our operations to ensure compliance with evolving regulatory requirements or, in some cases, to seek modifications to these requirements. There is a risk that our past, present or future operations have not or will not meet environmental requirements and that the modifications we are currently seeking or may need to seek in the future will not be granted. If we are unsuccessful in these efforts or otherwise breach these environmental requirements, we may incur fines or penalties, be required to curtail or cease operations and/or be subject to significantly increased compliance costs or significant costs for rehabilitation or rectification works, which have not been previously planned at one or more of our sites. In addition, environmental regulation of lead and certain of our other products and by-products is generally becoming more onerous. Increased environmental regulation of our products and activities or any changes to the environmental regulations we currently face could have an adverse effect on our financial condition and results of operations.

The deeds of company arrangement are intended to extinguish certain environmental liabilities (other than statutory liabilities to the government) for events occurring prior to 20 September 2001 affecting companies in the Zinifex group, so that Zinifex will no longer be responsible for them.

We are also subject to the ongoing risk of potential environmental litigation and compensation claims at our sites, any of which may have a material adverse effect on us. In particular, there is a risk that actions could be brought against us alleging adverse effects of lead or other substances on health or the environment in areas surrounding our sites. Our Port Pirie smelter operations have, in the past, been subject to class action claims alleging such injury. If any such claims are brought against us and are successful, the outcome could have a material adverse effect on our financial condition and results of operations.

Closure of any of our mines or smelters, whether at the end of its natural life or earlier, could trigger significant employee redundancy costs, environmental closure and rehabilitation expense and other costs. Although we have reflected estimates of these costs with respect to our mines as provisions in our financial statements and, in some cases, we have made cash deposits with governmental bodies which do not fully cover these amounts, the actual closure costs may turn out to be higher than we have estimated. We do not book closure provisions in our financial statements for our smelters until a plan for closure is effected. Moreover, in the event one or more of our sites is closed earlier than anticipated, we will be required to fund the closure costs on an expedited basis, which could have an adverse effect on our financial condition and results of operations. In addition, the risk exists that claims will be made against us arising from environmental remediation upon closure of one or more of our sites.

All estimates of environmental rectification and remediation costs contained in this Institutional Offering Memorandum, including the "Pro-forma Historical Financial Information", should be read subject to the above risks.

We are subject to risks arising from dependencies between our mining and smelting operations.

We are an integrated zinc and lead producer, which means that our mines and smelters have a number of arrangements and dependencies on each other, the termination of any of which could adversely affect our business. For example, smelting production at each of our sites is reliant upon specific types of concentrate inputs. In a number of instances, these concentrates are not readily interchangeable between the smelters and, therefore, individual smelting operations would be adversely affected by constraints in availability of the relevant concentrate. Our Port Pirie smelter forms an integral part of the environmental solution for treating or storing residues from our Hobart smelter. We may in the future close one or more of our mines or smelters which, due to these dependencies, could have an adverse affect on our remaining businesses.

We are highly dependent on our Century mine and its zinc concentrates.

We are highly dependent on our Century mine, which supplies all of the zinc concentrate processed at the Budel smelter and approximately 20% of the lead concentrate processed at the Port Pirie smelter. Our Century mine also produces significant amounts of concentrates for sale to third parties. We also intend to use Century zinc concentrates to supply a significant proportion of the zinc concentrate requirements of our Hobart smelter in the future. Any significant disruption for a sustained period to the continued operations at our Century mine, the pipeline to transport Century zinc concentrates to the port at Karumba or the timely delivery of the Century zinc concentrate to our smelters would have a material adverse effect on our financial position and results of operations.

Century's mine plan involves sequential stages of development, with each stage requiring pre-stripping of waste material to access the ore in that portion of the ore body. Insufficient pre-stripping progress could lead to exhaustion of ore in one stage prior to exposure of ore in the subsequent development stage, leading to a disruption in ore supply to the mill. Any such temporary loss of mill ore supply and concentrate revenues would have a material adverse effect on our results of operations and financial position. The next planned transition is expected during August 2004. See "Business – Century – Mining Operations" for more detail regarding management of this transition.

We have limited reserves of zinc and lead and, if our reserves are not replaced, we will need to purchase increased amounts of concentrate as current reserves are depleted in order to maintain our smelter production.

Our mines are a major source of zinc and lead concentrates for our smelters. Over time, unless our ore reserves are replaced, they will be depleted by our mining operations. We estimate that we have sufficient reserves to continue mining at current rates for approximately twelve years at Century and two years at Rosebery, although based on the historic conversion of resources to reserves and resource extensions, a total of at least six years additional mine life is factored into Rosebery's current mine plan. Replacement of our ore reserves is dependent upon the discovery of extensions to existing ore bodies and/or the discovery or acquisition of new ore bodies. Because of the geological nature of the Century ore body, the prospects for discovery of extensions to its reserves are unlikely. In addition, our exploration activities in general have been minimal. Accordingly, we may have to acquire concentrates from third parties on a competitive basis with other zinc and lead refiners to supply our smelters in the future. This could have a material adverse effect on our results of operations. In addition, some of our smelting operations may not be able to process such third-party concentrates efficiently or at all.

The estimated amount of our reserves may not be recoverable in full.

While our ore reserves are believed to be well established, ore reserve estimates are necessarily imprecise and involve subjective judgements regarding the presence and grade of mineralisation and the ability to economically extract and process the mineralisation. Should we encounter mineralisation or geological or mining conditions at any of our mines or projects different from those predicted by historical drilling, sampling and similar examinations, mining plans may have to be altered in a way that might adversely affect our operations and reduce our ore reserves. Should such reductions occur, material write-downs of our investment in mining properties and/or increased amortisation charges may be required.

No assurance can be given that the reserves presented in this Institutional Offering Memorandum will be recovered at the quality or yield presented. Investors should not assume that resource estimates are capable of being directly reclassified as reserves under the JORC Code. The inclusion of resource estimates should not be regarded as a representation that these amounts can be economically exploited and you are cautioned not to place undue reliance on resource estimates, particularly inferred resource estimates. For a further discussion of these considerations, see Annex E to this Institutional Offering Memorandum.

We face intense competition and our failure to compete effectively could have a material adverse effect on our results of operations and financial condition.

The markets for zinc and lead products are intensely competitive. The zinc and lead industry is characterised by technological advancements and introductions of new production processes using new technologies. We have numerous competitors worldwide. These competitors may develop technologies and processing methods that are more effective or less costly than our existing technologies and processing methods. Some of these competitors have substantially more resources and a greater marketing scale than we do. Competitive activity in the markets we serve can have a significant impact on the price we realise for our products, and could therefore have a material adverse effect on our results of operations or financial condition. For a discussion of the competitive forces in the zinc and lead industries, see "Zinc and Lead Industry Overview".

We are subject to the risk of industrial relations action which may disrupt our operations.

Approximately 60% of our Australian workforce is covered by enterprise bargaining arrangements underpinned by awards (standardised terms and conditions of employment). Our operations at Century mine are covered by Staff Contracts, and Australian Workplace Agreements (employment contracts between individuals and Zinifex) or collective bargaining agreements between Zinifex's contractors and their employees. Historically, the operations of certain of our sites have from time to time experienced work stoppages and other forms of industrial action. There can be no assurance that our operations will not be affected by industrial relations action in the future, and there can be no assurance that work stoppages or other labour-related developments will not adversely affect our results of operations or financial condition in the future.

Native title rights can impact our ability to operate effectively.

"Native title" describes the rights and interests of Aboriginal and Torres Strait Islander people in land and waters according to their traditional laws and customs that are recognised under Australian law. The native title of a particular group will depend on the traditional laws and customs of those people. Recent decisions have indicated that native title may change over time.

Native title may exist in areas where it has not been extinguished (removed). Native title cannot invalidate anyone else's validly granted or validated rights but native title may coexist with other forms of tenure where that tenure is not exclusive. While we believe that native title issues will not impact our existing operations, there is no assurance that claims asserting native title rights with respect to our mine properties will not arise in the future. Furthermore, while we believe that we have had good relations with the local Aboriginal communities at Century, the terms of our Gulf Communities Agreement requires us to provide these local communities with certain benefits. If we are unable to provide these benefits or a local community group perceives that we are not appropriately meeting our obligations under the Gulf Communities Agreement, such community group may seek to take action either through legal or judicial channels or through other activities that could impact our ability to effectively operate the mine.

There is currently no public market for our Shares and the price of our Shares is subject to uncertainty.

There is no public market for our Shares and there can be no assurance that an active market for our Shares will develop or continue after the Offering. The Final Price will be determined by negotiation among the Pricing Committee in consultation with the Administrators and representatives of the Joint Lead Managers, and may not be indicative of the market price for the Shares after the Offering. The trading price of the Shares could be subject to wide fluctuations in response to variations in operating results, zinc prices, exchange rates and other events or factors. In addition, stock markets have experienced extreme price volatility in recent years. This volatility may adversely affect the market price of the Shares.

The participation of the creditors in the Bookbuild for the Offering may affect the pricing of the Offering and the aftermarket trading in the Shares.

Excluding Deed Creditors who are affiliated with a Joint Lead Manager, some Deed Creditors that will receive the net proceeds of the Offering have provided irrevocable firm bids and will receive an Initial Priority Entitlement for up to 10% of Zinifex's share capital available in the Offering. Deed Creditors that (i) have not participated on the Pricing Committee after 20 February 2004; and (ii) are not affiliated with a Joint Lead Manager, will be provided with an additional priority allocation for up to 10% of Zinifex's share capital. Such creditors may be allocated Shares in the Bookbuild in addition to the Shares available to them under the Bookbuild priority allocation and the Initial Priority Entitlement. In addition, creditors will be able to bid into the Bookbuild on a normal basis without priority allocation. The total allocation made to any individual creditor and its affiliates for their own account in (i) the Initial Priority Entitlement, (ii) the Bookbuild Priority Allocation or (iii) the Bookbuild will be limited to a maximum of 10% of the overall issued capital of Zinifex. In all cases, creditors participating in the Offering in any way will be required to pay the Final Price for the Shares to which it has a priority or which are allocated to it and settlement of the sale of the Shares to them will be on the same terms as any other institutional investor applicant under the Offering.

Creditors participating in the Bookbuild through the priority allocations or otherwise will in effect be both buyers and sellers in the Offering as the net proceeds from the Shares sold in the Offering will ultimately be distributed to the creditors. Accordingly, these creditors have an interest in the pricing of the Offering that may be contrary to the interests of other bidders in the Bookbuild. For those creditors allocated Shares in the Offering pursuant to the Initial Priority Entitlement, the Bookbuild Priority Allocation or under the Bookbuild, there is no restriction on the ability of those creditors to dispose of the Shares they acquire in the Offering. These creditors may not be long-term holders of Shares and, as a result, some creditors could seek to dispose of some or all of their Shares following the completion of the Offering. Any such sales could impact the aftermarket trading price of the Shares.

Our actual results may be worse than those contained in forecast financial information included in this Institutional Offering Memorandum.

Included in this Institutional Offering Memorandum are the forecast performance and cash flow statements for fiscal years 2004 and 2005. These forecasts have been prepared based upon an assessment of present economic and operating conditions and on a large number of assumptions regarding future events and actions. These assumptions are subject to fluctuating exchange rates and metal prices, as well as a variety of significant business, economic and competitive uncertainties, many of which are outside our control. The results are particularly sensitive to zinc prices denominated in Australian dollars and if the actual zinc prices denominated in Australian dollars in a period are lower than the assumed prices, this could cause the actual results to be materially worse than those contained in the forecast financial information. The forecast financial information, including the extent of their sensitivity to zinc prices, is contained in "Certain Prospective Financial Information for Zinifex" in this Institutional Offering Memorandum. Inclusion of the forecast financial information in this Institutional Offering Memorandum should not be regarded as a representation by any person that the results contained in the forecast financial information will be achieved.

THE OFFERING

The Offering

The Offering consists of a total of 500 million Shares, less the number of Zinifex shares taken up pursuant to the Employee Gift Offering and shares issued by the Company to our Managing Director. The actual proceeds from the Offering will depend on the Final Price as determined in the Global Institutional Offering and the allocation of Shares between the Global Institutional Offering and the Australian Retail Offering. The allocation of Shares between the Global Institutional Offering and the Australian Retail Offering under this Institutional Offering Memorandum will be determined by the Joint Lead Managers in consultation with Zinifex.

The Offering comprises two parts:

- a Global Institutional Offering; and
- an Australian Retail Offering.

The Australian Retail Offering comprises:

- a General Public Offering – open to members of the general public who are resident in Australia;
- a Broker Firm Offering – open to Australian investors who have received a firm allocation of Shares from a syndicate member or a participating broker; and
- an Employee Offering – a priority offering open to eligible employees in Australia.

The Employee Gift Offering is a separate offer by the Company of an issue of Zinifex shares open to eligible employees in Australia, The Netherlands and the United States. The Employee Gift Offering consists of an initial gift of Shares up to a value of A$1,000 per employee under the Employee Share Acquisition Plan. See "Directors and Senior Management – Zinifex Limited Share Plans" and "Additional Information". These shares will be issued by Zinifex in addition to the Shares sold under this Offering and the shares issued to our Managing Director.

Applicants for Shares under the Global Institutional Offering will pay the Final Price as determined in the Bookbuild. The Final Price will be determined by the Pricing Committee in consultation with the Administrators and the Joint Lead Managers after the close of the Bookbuild. The indicative price range for institutions bidding for Shares under the Global Institutional Offering is A$2.10 to A$2.70 per Share. The Final Price may be set within, above or below this indicative price range.

Offering Timetable

Australian Retail Offering Opens	15 March
Australian Retail Offering Closes	30 March
Global Institutional Bookbuild Opens	31 March
Global Institutional Bookbuild Closes	2 April
Institutions Advised of Allocations and Final Price	2 April
Public Announcement of Final Price and Basis of Allocation	5 April
Expected Commencement of Conditional and Deferred Settlement Trading	5 April
Settlement of Global Institutional Offering	7 April
Transfer of Shares to Successful Applicants	8 April
Conditional and Deferred Settlement Trading Ends/Normal Trading Commences	14 April

All references to dates are Australian dates. All references to time are to Melbourne, Australia time. The above dates are indicative only, and they may be varied without notifying any recipient of this Institutional Offering Memorandum or any applicant for Shares.

Global Institutional Offering

The Global Institutional Offering will be conducted by a Bookbuild managed by the Joint Lead Managers. The bookbuild will be used to determine the Final Price.

The following is a summary of the arrangements that will apply to participants in the Global Institutional Offering. The Joint Lead Managers will provide details of the Global Institutional Offering, including bidding instructions, to participants in the Global Institutional Offering. See also "Plan of Distribution" for further details of the Global Institutional Offering.

Invitations to Bid

Invitations to bid for the Shares in the Global Institutional Offering are being made by way of:

- an offering in the United States to Qualified Institutional Buyers in transactions exempt from the registration requirements of the Securities Act pursuant to Rule 144A; and
- an offering outside the United States to institutional investors in Australia and in certain other countries in transactions exempt from the registration requirements of the Securities Act in reliance on Regulation S.

Pricing Committee

A Pricing Committee of the creditors of Pasminco Limited has been established under the deed of company arrangement executed by Pasminco Limited. Deed Creditors may participate in the Pricing Committee provided:

- their pre-VA claim is for more than A$5 million; and
- they have elected not to purchase Shares in the Offering.

Creditors that are members of the Pricing Committee must also take appropriate measures to ensure that communication with other business units of the creditor in relation to the Offering does not occur, for example through the establishment of "information barriers" or other such procedures.

Initial Bids from Creditors of Pasminco Limited

Deed Creditors were provided with an Initial Priority Entitlement to Shares. The Initial Priority Entitlement was only available to creditors who are not affiliated with a Joint Lead Manager and who lodged an irrevocable bid for Shares prior to this Institutional Offering Memorandum being lodged with ASIC. The Initial Priority Entitlement was available to Deed Creditors only in their capacity as creditors and did not extend to other business units, such as an asset management division, of those creditors. As part of this Initial Priority Entitlement, creditors have bid for, and will receive an allocation of, up to 50 million Shares. Creditors receiving an Initial Priority Entitlement will pay the Final Price for their Shares.

Bookbuild

The Global Institutional Offering will be conducted using a Bookbuild managed by the Joint Lead Managers, who are also the Joint Bookrunners. Bids must be made between 10:00 am on 31 March 2004 and 8:00 am on 2 April 2004 (Melbourne time), unless these dates vary.

Australian, U.S. and other international institutions may only submit bids through the Joint Lead Managers and their broker-dealer affiliates. The identity of each person making a bid must be disclosed to the Joint Lead Managers. If a bid is made in the name of a nominee or on behalf of another person, that fact and the identity of the proposed beneficial owner must be disclosed to the Joint Lead Managers. Information relating to the identity of bidders will be restricted to the Joint Lead Managers (and their associated officers) and nominated representatives of Zinifex, Pasminco Holdings Limited, the Administrators and creditors who are members of the Pricing Committee.

Bids may be in the form of specific price and/or Final Price bids.

Bids may be amended or withdrawn at any time up to the closing of the Global Institutional Offering. Any bid not withdrawn at that time will be irrevocable and can be accepted or rejected by Pasminco Holdings Limited in whole or in part, and upon acceptance will give rise to a legally binding contract. Full details of the settlement arrangements that will apply to bidders under the Global Institutional Offering will be provided to bidders prior to the commencement of the Bookbuild.

Deed Creditors that are not on the Pricing Committee have the right to bid into the bookbuild. Deed Creditors that are affiliated with a Joint Lead Manager are not permitted to participate in the bookbuild whether they participate in the Pricing Committee or not.

Those Deed Creditors that (i) have not participated in the relevant Pricing Committee meetings; and (ii) are not affiliated with a Joint Lead Manager will be provided with an opportunity to bid into the Bookbuild Priority Allocation in addition to their ability to participate in the Bookbuild process without this priority allocation.

Any Shares allocated to a creditor in the Bookbuild will be in addition to any allocation received by that creditor in the Initial Priority Entitlement. Creditors receiving Shares in the Bookbuild Priority Allocation or a normal allocation will pay the Final Price for their Shares.

The Bookbuild Priority Allocation is available only to Deed Creditors. Other business units of the creditors have the right to participate in the Bookbuild on their own account or for the benefit of discretionary or non-discretionary accounts. Other business units of creditors will be treated in the same way as other institutions and, in particular, will receive no priority in the allocation of Shares.

Determination of the Final Price

After the close of the Global Institutional Offering, the Pricing Committee, in consultation with the Administrators and representatives of the Joint Lead Managers, will determine the Final Price in order for the Offering to proceed. In determining the Final Price, regard will be given to the level of demand for the Shares, prevailing market conditions, the desire for an orderly secondary market in the Shares and the creation of an ownership base of quality, long-term shareholders of Zinifex.

A creditor of Pasminco Limited will be excluded from the Pricing Committee if it intends to bid for Shares in (i) the Initial Priority Entitlement, (ii) the Bookbuild Priority Allocation or (iii) the Bookbuild. A creditor may rejoin the Pricing Committee if it subsequently decides not to bid for Shares. Deed Creditors will not be excluded from the Pricing Committee, however, as a result of one of its other business units being allocated Shares under the Bookbuild.

The Final Price must yield aggregate sale proceeds of Shares that is equal to or that exceeds an amount approved by resolution of the Pricing Committee.

The Final Price may not necessarily be the highest price at which bids are submitted for Shares. All successful bidders in the Global Institutional Offering will pay the Final Price.

Institutions will be advised of the Final Price and of their allocations on 2 April 2004. The Final Price is expected to be publicly announced on or about 5 April 2004.

Successful bidders will not pay any stamp duty or brokerage on the Shares in the Global Institutional Offering.

Institutional Allocation Policy

The Joint Lead Managers, in consultation with Zinifex, will determine the allocation of our Shares amongst bidders in the Global Institutional Offering.

The total allocation made to any individual creditor and its affiliates for their own account in (i) the Initial Priority Entitlement, (ii) the Bookbuild Priority Allocation or (iii) the Bookbuild will be limited to a maximum of 10% of the overall issued capital.

Australian Retail Offering

Retail applicants under the Australian Retail Offering pursuant to an Australian Retail Prospectus will pay the Final Retail Price. The "Final Retail Price" will be the lower of the Retail Application Price of A$2.60 per Share and a discount of A$0.10 to the Final Price. If the Final Retail Price is below the Retail Application Price, retail applicants will receive a refund equal to the difference between the Final Retail Price of each Share allocated to the retail applicant and the Retail Application Price.

There is no maximum amount that may be applied for under the Australian Retail Offering. However, after consultation with the Joint Lead Managers, the Company and Pasminco Holdings Limited reserve the right to treat applications from Australian retail investors in excess of A$250,000 as part of the Global Institutional Offering. In addition, where the Joint Lead Managers consider that investors who would typically be regarded as institutional investors have applied under the Australian Retail Offering, the Administrators and the Joint Lead Managers reserve the right to treat such applications as bids in the Global Institutional Offering.

Scale Back in the Event of Oversubscriptions

If the number of Shares applied for in the Australian Retail Offering and the Global Institutional Offering is greater than the number of Shares available, scale back arrangements will apply. Applications under the Employee Offering will not be scaled back below the value of A$10,000 worth of Shares while allocations in respect of the Employee Gift Offering will be met in full.

Foreign Ownership Restrictions

The Australian Foreign Acquisitions and Takeovers Act 1975 (Cth) ("FATA") has the effect that a foreign person (within the meaning of that term in the FATA) together with that person's associates (within the meaning of that term in the FATA) may not, without obtaining approval from the Australian Treasurer, acquire 15% or more of the Shares being offered under the Offering.

The Joint Lead Managers will take steps to ensure that Shares are allocated in such a way as to ensure that this prohibition will not be contravened.

The FATA also has the effect that the Treasurer may order that two or more foreign persons holding Shares in Zinifex divest some or all of their Shares if the foreign persons together with their associates are in a position to control or hold interests in 40% or more of the Shares in Zinifex and the Treasurer is not satisfied that, having regard to all the circumstances, those persons together with their associates are not in a position to determine the policy of Zinfex.

The Joint Lead Managers will take steps to ensure that Shares are allocated under the Offering in such a way that the Treasurer would be unlikely to be satisfied that two or more foreign persons together with their associates would, after Shares are transferred under the Offering, be in a position to determine the policy of Zinifex.

Trading on the ASX – Conditional Market

We expect that trading of the Shares on the ASX will commence on a conditional and deferred settlement basis on the first business day after determination of the Final Price. This is expected on or about 5 April 2004. Deferred settlement trading will continue until despatch of holding statements on or about 13 April 2004.

The contracts formed on acceptance of applications under the Australian Retail Offering and the Global Institutional Offering, and trades on the ASX during conditional trading of Shares, will be conditional on:

- the restructuring occurring as described in "Voluntary Administration and Restructuring";
- settlement occurring under the Selling Agreement; and
- our Board resolving to issue the Shares to be issued under the Offering and the board of directors of Pasminco Holdings Limited resolving to sell the Shares.

The Selling Agreement will include certain conditions to settlement and rights of termination in certain circumstances. For a description of these conditions to settlement and termination rights, see "Additional Information – Selling Agreement".

Conditional trading will continue until we notify the ASX that the conditions specified above have been satisfied. If we do not give that notice to the ASX by 8 April 2004, the conditions will be taken not to have been satisfied, in which case the Offering will be withdrawn, the contracts formed on acceptance of applications under the Australian Retail Offering and the Global Institutional Offering will be terminated, all conditional trades that may have occurred on ASX during conditional trading of Shares will be cancelled, and all application monies received in respect of the Offering will be refunded. No interest will be paid on any application monies which are refunded.

After the satisfaction of the conditions set out above, there will be a further period of deferred settlement trading until the despatch of holding statements, which are expected to be despatched on 13 April 2004.

Confirmation of Allocations

Details of the basis of allocation of the Shares will be advertised in certain Australian newspapers on 5 April 2004 or can be confirmed by calling the Zinifex Information line on 1 300 307-624. Investors are responsible for confirming their allocation of Shares before trading in the Shares. Anyone who sells Shares before receiving confirmation of their allocation does so at their own risk.

We, the Administrators, Pasminco Holdings Limited, Pasminco Limited and the Joint Lead Managers disclaim all liability, whether in negligence or otherwise, to anyone who trades Shares before receiving their holding statement, whether on the basis of a confirmation of allocation provided by us, the Administrators or otherwise.

CHESS and Holder Statements

We will apply to participate in CHESS and, in accordance with the ASX Listing Rules and the SCH Business Rules, we will maintain an electronic issuer-sponsored subregister and an electronic CHESS subregister.

Following the transfer of our Shares to successful applicants, our new shareholders will receive an initial statement of holding (similar to a bank account statement) that sets out the number of Shares which have been allocated to them in the Offering. This statement will also provide details of a shareholder's HIN in the case of a

holding on the CHESS subregister, or SRN in the case of holding on the issuer-sponsored subregister. Our shareholders will be required to quote their HIN or SRN, as applicable, in all dealings with a stockbroker or the Share Registry.

Our shareholders will receive subsequent statements at the end of any month in which there has been a change to their holding on the register and as otherwise required under the ASX Listing Rules.

Non-Australian Selling Restrictions

We have not taken any action to register or qualify the Australian Retail Prospectus, this Institutional Offering Memorandum, our Shares or the Offering, or otherwise to permit a public offering of our Shares, in any jurisdiction outside Australia. The distribution of this Institutional Offering Memorandum in jurisdictions outside Australia may be restricted by law and therefore persons into whose possession this Institutional Offering Memorandum comes should inform themselves about, and observe, any such restrictions. Any failure to comply with these restrictions may constitute a violation of applicable securities laws. See "Notice to Investors" and "Plan of Distribution" for specific restrictions applicable to the Offering outside of Australia, including in the United States.

This Institutional Offering Memorandum does not constitute an offering of Shares in any jurisdiction where, or to any person to whom, it would not be lawful to make such an offering. Along with the Administrators, Pasminco Limited and Pasminco Holdings Limited, we disclaim all liabilities, costs or expenses incurred by these persons.

Withdrawal or Early Close of the Offering

Pasminco Holdings Limited reserves the right to withdraw or to close the Offering at any time prior to the announcement of the Final Price and the basis of allocations. If the Offering is withdrawn, all application monies from Australian retail investors will be refunded. No interest will be paid on refunded application monies.

USE OF PROCEEDS

We will not receive any of the proceeds of the Offering. The proceeds of the Offering will be used by Pasminco Limited to repay financial debt incurred since the commencement of its voluntary administration and to satisfy the claims of its creditors pursuant to the deed of company arrangement executed by Pasminco Limited.

DISTRIBUTION POLICY

Zinifex Limited does not currently intend to make any distribution to shareholders in respect of fiscal year 2004 and will consider whether to make a distribution with respect to fiscal year 2005 depending on Zinifex Limited's performance and financial position at such time. The proposed policy of the Board is to target future distributions to shareholders that take into account the capital and cash requirements of the Zinifex group.

Accordingly, the Board's current intention is to aim that over time the Company will make distributions to our shareholders of the majority of our free cash flow after funding of operating, investment and financing activities.

Any future determination regarding distributions to shareholders will be at the discretion of the Board and will depend on a range of factors, including the availability of distributable profits, Zinifex Limited's financial position, taxation considerations, the ongoing capital and cash requirements of Zinifex Limited, and such other factors as the Board considers relevant. No representation is made as to when, in what form or whether Zinifex Limited will make any distribution to shareholders in the future.

PRO FORMA CAPITALISATION

The following table sets out our pro forma short-term debt and capitalisation which has been calculated in accordance with Australian GAAP as at 31 December 2003 as adjusted to give effect to the restructuring in the administration and our capital structure following the Offering. This table should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations", the Independent Accountant's Report beginning on page F-2 and our Pro Forma Historical Financial Information and the related notes included elsewhere in this Institutional Offering Memorandum.

	Pro Forma as at 31 December 2003
	(in A$ millions)
Short-term debt	30.7
Long-term debt	160.3
Shareholders' equity	
Contributed equity	1,239.6
Retained earnings	—
Outside equity interests in controlled entities	—
Total shareholders' equity	1,239.6
Total capitalisation[1]	1,399.9

(1) Total capitalisation consists of total long-term debt and total shareholders' equity.

ZINC AND LEAD INDUSTRY OVERVIEW

We have obtained much of the information in this section from Brook Hunt and Associates Ltd, in particular the zinc and lead price forecasts and related supply and demand forecasts. Brook Hunt is an international strategic analyst to the metal industries and markets and maintains a mining and metals industry database based on interaction with metal producers and consumers. Brook Hunt prepares publications covering the short- and long-term outlook for metal and concentrate markets; and key developments in mine, smelter and refinery output, and makes forecasts of base metal prices.

We refer to the "Western World" as those developed countries with a relatively open and free flow of information about their economies. By contrast, some countries, including the Commonwealth of Independent States, China and Eastern Europe, referred to in this section as "non-Western countries", have economic systems that are less transparent with a lower level of reliable information. As a result, some of the data contained in this section may have emanated from sources less certain than corresponding sources for Western World countries and investors should take this into account when reading this section. Commodity price forecasting is subject to uncertainty and the actual zinc and lead prices that transpire over the forecast period can be expected to differ from those set out by Brook Hunt. See "Cautionary Note Regarding Market Industry Data and Reserves and Resources" and "Risk Factors". All references to years in this section refer to calendar years unless otherwise stated.

Zinc Summary

Concerns about over supply, high inventory levels and an uncertain U.S. economic recovery kept LME cash prices below US$800 per tonne (36 US cents per pound) in early 2003. Treatment charges were at historically low levels. The combined low treatment charge and price for refined metal put zinc smelter profitability under stress. In the second half of the year, there was a significant turnaround in the market assessment of zinc fundamentals. The outlook for the U.S. economy greatly improved with stronger than expected Gross Domestic Product growth. Growth in China, the world's largest zinc market, remains strong. Furthermore, significant cuts to refined capacity, particularly in Europe, have helped to underscore the likelihood of a realignment of production with demand. While these production cuts have been offset by increases in refined capacity elsewhere, most notably in China, the lack of available concentrate in the medium term will restrict the amount of zinc metal coming onto the market. The combination of an improved demand scenario with future supply constraints has improved the market's perceptions of zinc fundamentals with the zinc price moving firmly above US$1,000 per tonne (45 US cents per pound) in the early part of 2004.

The refined zinc market is forecast by Brook Hunt to move into a substantial deficit in 2004 and to remain so until 2006, when accumulated stocks will have been reduced to more normal levels. This creates the necessary economic conditions for the zinc price to move substantially higher to reach a forecast cyclical high of US$1,565 per tonne (71 US cents per pound) in 2008. Thereafter, Brook Hunt forecasts four years during which the zinc price will move progressively lower to reach a cyclical low in 2012 of US$1,190 per tonne (54 US cents per pound). The five-year period average from 2004 to 2008 is forecast at US$1,293 per tonne (59 US cents per pound).

Lead Summary

Similarly, the fundamentals of the lead market have improved substantially during 2003. Lead concentrate supply constraints, coupled with an improvement in lead demand, kept the concentrate market extremely tight. Treatment charges have been at historic lows. Stiff competition from Chinese primary smelters, which are able to operate at much lower treatment charges than Western World smelters, resulted in a significant reduction in primary smelter capacity during 2003. With metal output restricted, LME stocks fell substantially during the year and the LME lead spot price broke above US$700 per tonne (32 US cents per pound) in early 2004 for the first time in seven years. With additional primary smelter capacity cuts likely and an improving demand profile as general economic conditions strengthen, the outlook for lead fundamentals remains strong.

The refined lead market is forecast by Brook Hunt to continue in deficit in 2004 but to be followed then by four years of relatively modest surpluses. Over the period to 2007, total refined lead stocks are expected to remain at a low level and to be supportive of sound metal prices, which are forecast to peak at US$718 per tonne (33 US cents per pound) in 2004 before declining to a cyclical low of US$486 per tonne (22 US cents per pound) in 2008. The five-year period average from 2004 to 2008 is forecast at US$603 per tonne (27 US cents per pound).

Zinc Overview

Zinc is essential to modern society. It is a metal that is chemically active and alloys readily with other metals such as copper, aluminium and magnesium. It is durable and its ability to react with iron is of particular significance as it imparts extremely good corrosion resistance to steel substrate when used as a galvanised or applied coating. It is relatively hard, with a low melting point, making it eminently suitable for diecasting, but still soft enough to be formed, rolled or extruded.

By prolonging the life of steel, zinc helps conserve natural resources such as iron ore and energy by extending the life of goods and capital investments. It is estimated that corrosion of steel consumes approximately 4% of global GDP (some US$960 billion annually) and that only 15% of all steel and 50% of sheet steel is protected by zinc. Thus, there is an economic rationale for further growing the intensity of zinc use.

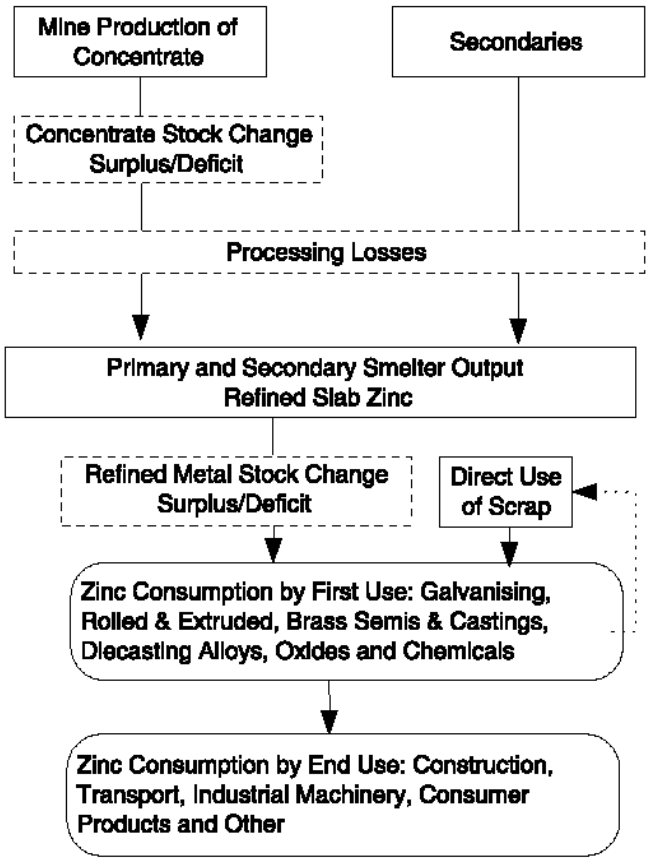
Zinc is usually found in ore bodies in association with other minerals, commonly those of lead, copper, silver or gold. Over the past decade, zinc mines averaged 60% of revenue from zinc, 25% in roughly equal portions from lead and copper, and 15% from silver and gold.

Zinc concentrate and recycled zinc-bearing secondary material is converted to refined zinc metal at primary smelters. The hydrometallurgical process route used at electrolytic smelters predominates and is capable of meeting 90% of the world's demand for zinc. Bulk concentrate contains both lead and zinc and can only be processed by ISF smelters using the pyrometallurgical Imperial Smelting Process, which accounts for 10% of the world's refined output.

Zinc metal is produced in a variety of grades and shapes to meet the requirements of LME registration and the particular needs of customers. The standard specification of traded zinc is now the 99.995% zinc of Special High Grade ("SHG"), the grade of zinc metal on which the LME contract is based.

Ninety percent of the supply to the first-use market, which is dominated by the galvanising, brass and diecasting industries, is provided by primary and secondary smelter output. The balance is provided by the direct use of scrap zinc, such as brass and other zinc-containing alloys, generated by downstream industries. In 2003, world consumption of refined zinc was 10.8 million tonnes per year, of which 1.1 million tonnes per year was the direct use of scrap and 9.7 million tonnes per year was from primary and secondary smelting plants. The process from mining through to the end user is depicted by the market flow diagram below.

Zinc Market Flow Diagram



Source: Brook Hunt

Leading Zinc Mining and Smelting Companies

Between 1996 and 2003, some degree of industry production consolidation occurred. The ten largest zinc mining companies in 1996 controlled 36% of world production that increased to 40% of global production controlled by the ten largest companies in 2003. In smelting, the concentration of ownership has also increased, with 48% of world production being controlled by the ten largest companies in 2003 relative to 43% in 1996. The 2003 zinc production rankings of the ten largest zinc mining and zinc smelting companies is shown below.

2003 Production (Provisional) Ranking of Zinc Mining and Smelting Companies

Mines			Smelters		
By Company	kt Zn	%	By Company	kt Zn	%
Teck Cominco	680	7.1	Korea Zinc	902	9.3
Pasminco(1)	670	7.0	Pasminco[1]	670	6.9
Noranda	565	5.9	Xstrata	603	6.2
Boliden	416	4.2	Umicore	572	5.9
Xstrata	393	4.0	Boliden	464	4.7
Glencore	323	3.4	Teck Cominco	392	4.1
Anglo American	296	3.1	Glencore	294	3.0
Hindustan Zinc	293	3.1	Hunan Nonferrous Industry	261	2.6
Minera Volcan	273	2.9	Votorantim	252	2.6
BHP Billiton	233	2.4	Penoles	225	2.3
World Total	9,556	100	World Total	9,831	100

(1) Zinifex assets had zinc mining and smelting production capacities of 600,000 and 640,000 tonnes per year in 2003, respectively. Xstrata data includes former MIM Holdings production, and Boliden data includes former Outokumpu production.

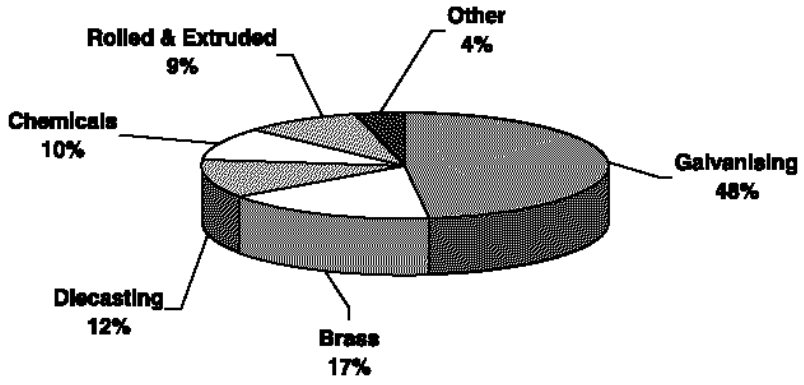
Source: Brook Hunt

Trends in Demand for Zinc

First-Use Market

Galvanising of steel is the predominant first use for zinc, accounting for 48% of zinc usage in all forms in 2003. The next largest use of zinc is in brass, accounting for 17% of total demand, followed by diecasting at 12%. A breakdown of first-use applications of zinc is provided in the diagram below.

2003 World Zinc Consumption by First Use (kt Zn)



Source: Brook Hunt

Galvanising is the coating of steel with zinc or zinc alloys in order to give resistance against corrosion. Zinc consumption for galvanising has almost doubled since 1980 with period average growth rates of 2.7% per year and 4.1% per year for the 1980s and 1990s, respectively. This growth was primarily driven by consideration of full life-cycle costs in the automotive, consumer durables and construction sectors, allied with rising end-use demand especially from the automotive industries and from the developing economies in Asia. Pressures to

reduce vehicle weight, to extend car lives, and to enhance recycling are all relevant to the long-term outlook for zinc demand. In both absolute and percentage terms, Brook Hunt expects galvanising to remain zinc's largest and fastest growing market.

Brass, a copper-zinc alloy, can be cast, forged or formed into sheet, wire and rod. Because of its high tensile and yield strength, it is machineable, thereby lending itself well to complex shapes. Its physical properties (non-magnetic, high electrical conductivity, and high corrosion resistance) make brass suitable for many electrical purposes. Because of its high copper content, brass is comparatively expensive for some uses and zinc consumption in brass has been flat since 1980. In the automotive industry, the weight of brass, particularly compared to other materials like aluminium and plastics, has resulted in its widespread substitution for other, more light-weight materials.

Diecasting of zinc alloys continues to face intense substitution pressure particularly from aluminium alloys and plastics. However, diecasting is now a growing market for zinc. The renewed popularity for zinc alloys in diecasting has stemmed from the development of new diecasting alloys. The automobile industry remains the most important end user for diecasting alloys, accounting for approximately 30% of the total zinc diecasting market. Brook Hunt expects that higher levels of car production will increase demand for zinc diecastings in automobiles, but the gain will be offset in part by a further decline in per unit use as a result of continuing pressure to substitute lighter materials.

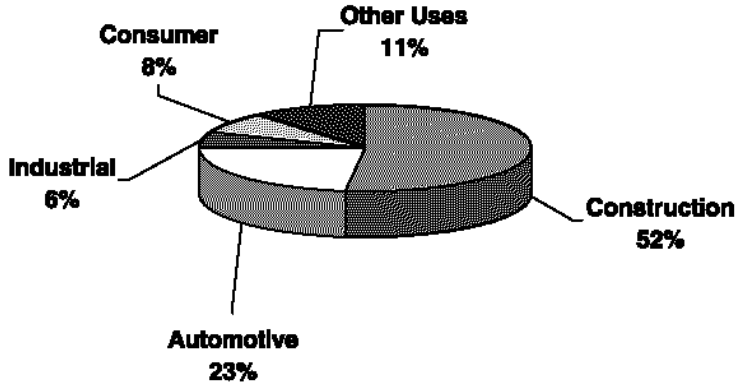
Oxides and chemicals accounts for around 10% of zinc consumption. The principal use for zinc oxide is the vulcanisation of rubber, principally in tyres. Demand is driven by replacement needs and the expansion of the world's vehicle fleet, particularly in developing economies. Zinc oxide is also used in paints, coatings, ceramics, pharmaceuticals and agriculture.

Rolled and extruded zinc is predominantly used in traditional roofing and cladding markets throughout the world, with smaller uptake in gutters and down-pipes markets. Demand is closely correlated with building industry activity. The largest market for rolled and extruded zinc is Europe, where it has been traditionally used for roofing in France and Germany.

End-Use Market

In 2003, the largest end-use market for zinc was the construction sector, accounting for 52% of global zinc usage, followed by the automotive sector at 23%. The segmentation of end use markets is shown in the diagram below.

2003 World Zinc Consumption by End Use (kt Zn)



Source: Brook Hunt

Construction continues to be the major market for galvanised steel where it is used to provide heating and air vent ducting, roofing, cladding, and partition and floor systems. The introduction of colour coated steel improved steel's opportunities in the roofing market as it provides an attractive, as well as durable finish. The main drivers of growth in demand for galvanised steel in the construction sector are non-residential construction and infrastructure projects. The alloys galvalume (43.5% zinc/55% aluminium) and galfan (95% zinc/5% aluminium) enjoy niche markets in the construction industry where corrosion resistance of unpainted surfaces is a high priority.

Automotive manufacturers' requirements for reduced costs and lower body weight have led to major developments in zinc alloys and galvanising techniques. Manufacturers of galvanised steel have sought to form strong ties with the automotive industry to ensure that zinc coated steel continues to meet material specification. Zinc's three main uses in automobile manufacturing are corrosion protection, diecastings and zinc oxide in tyres. The trend towards longer and more comprehensive corrosion warranties has led to increased use of galvanised steel in structural and body panel applications.

Zinc is also used in structural applications where its mechanical and physical properties make it more cost effective than alternative products, particularly in low weight, thin wall diecastings. The net effect of these factors has been only a small decrease in per-car use of zinc in the Western World, which has been offset by overall growth in world automobile production.

Consumer products are the smallest market for coated steel, which accounts for about 5% of the total end-use market for zinc. In this sector, there is a preference for premium coated steel, such as electrolytic and galvanneal, in order to obtain a smooth surface for painting and superior corrosion resistance. Examples of consumer goods that use premium coated steel are dishwashers, refrigerators, freezers and personal computers.

Industrial equipment and machinery covers a very wide range of galvanised products. The products range from large tanks, extractor ducting and fans, through computer mainframes and servers down to nuts and bolts. Paint remains the main competitor, but stainless steel and composites compete in some of the more demanding environments. Demand from this sector moves closely with business expenditure on plant and equipment.

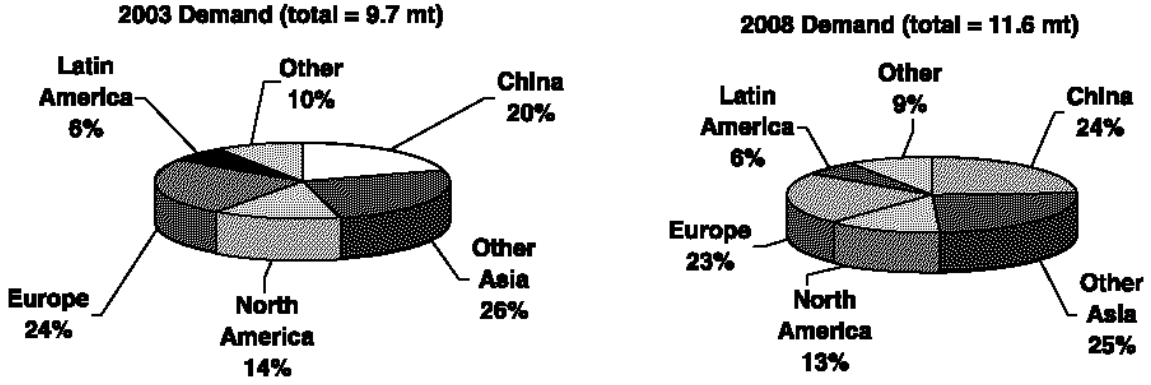
Overall, the pattern of zinc consumption in the end-use markets shows that demand for zinc moves closely with changes in industrial production.

Geographic Patterns of Demand in Zinc Metal Consumption

There is a good correlation between per capita demand for zinc metal and GDP per head of population. The fastest expansion of demand in the past decade has been in the developing countries, especially in Asia. As per capita incomes rise, and a greater share of income is spent on services of all kinds, the rate of growth of demand for zinc tends to fall back. That suggests that the future demand growth will be mainly in developing countries, including China.

Global refined zinc demand increased at a trend rate of 2% per annum for the period from 1980 to 2001. Global demand grew by an average 3.1% per annum from 1995 to 2000 as the world economy benefitted from a strong upturn in the business cycle in North America, and the rapid recovery of most Asian economies from the economic crises of 1997-98. Demand for zinc also began to revive in the Commonwealth of Independent States and Eastern Europe after the earlier steep declines. China's demand for zinc metal rose threefold during the 1990s and by 71% between 1995 and 2001 when it became the largest zinc consuming country in the world. The 2003 historical and 2008 forecast world zinc consumption percentages by geographical market are shown below.

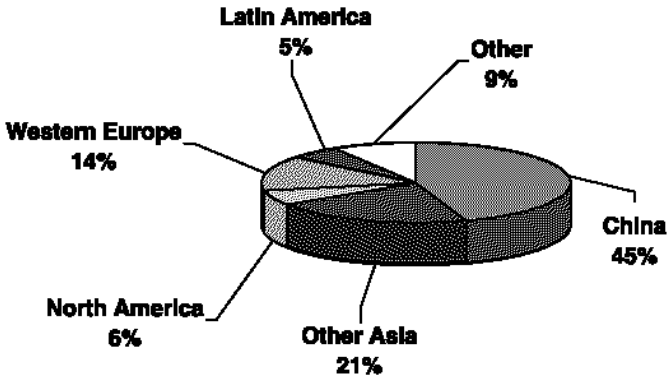
Historical and Forecast World Zinc Consumption (kt Zn)



Source: Brook Hunt

Brook Hunt forecasts the annual average rate of growth of global zinc demand to be 3.7% per annum up to 2008. The distribution of forecast consumption growth by market is shown in the diagram below.

Forecast World Zinc Consumption Growth 2004-08

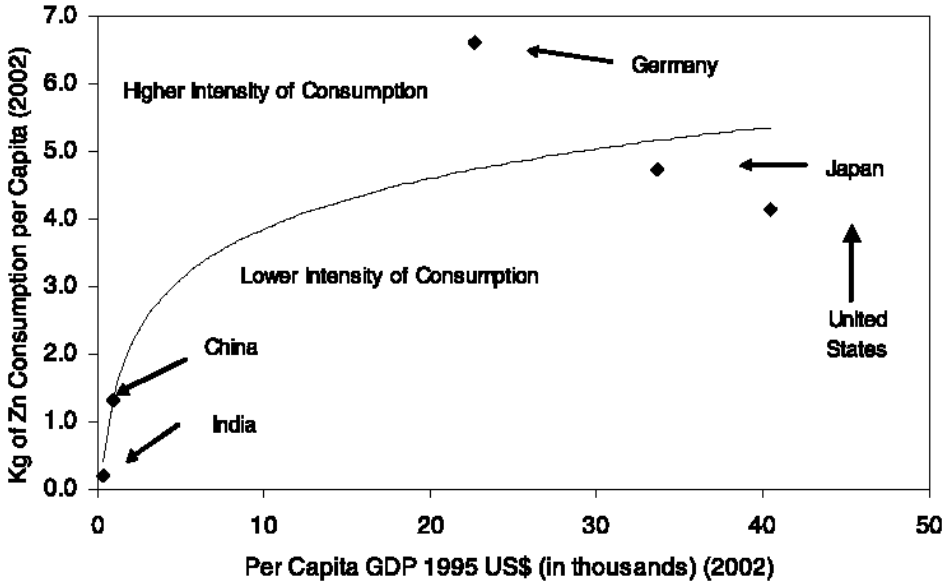


Source: Brook Hunt

Brook Hunt expects that the driving force behind future growth in zinc demand will be the economic recovery in the United States and rising consumption in China. Brook Hunt assumes that industrial output will recover strongly in the United States throughout 2004. It expects the revival in the main West European economies and Japan to follow the improvement underway in the United States.

Brook Hunt forecasts zinc demand growth rates in China over the medium term will continue to be strong due to ongoing infrastructure and foreign direct investment as production facilities are relocated from other Asian countries. Chinese demand for zinc is broadly based across most uses, but galvanizing uses, especially in China's booming construction and automobile sectors, are major drivers of growth. China has entered a period of rapidly accelerating intensity of zinc usage that is driven by both industrialisation and more recently by consumer demand for motor vehicles, white goods and buildings. Its position on the growth curve is compared with other economies in the diagram below.

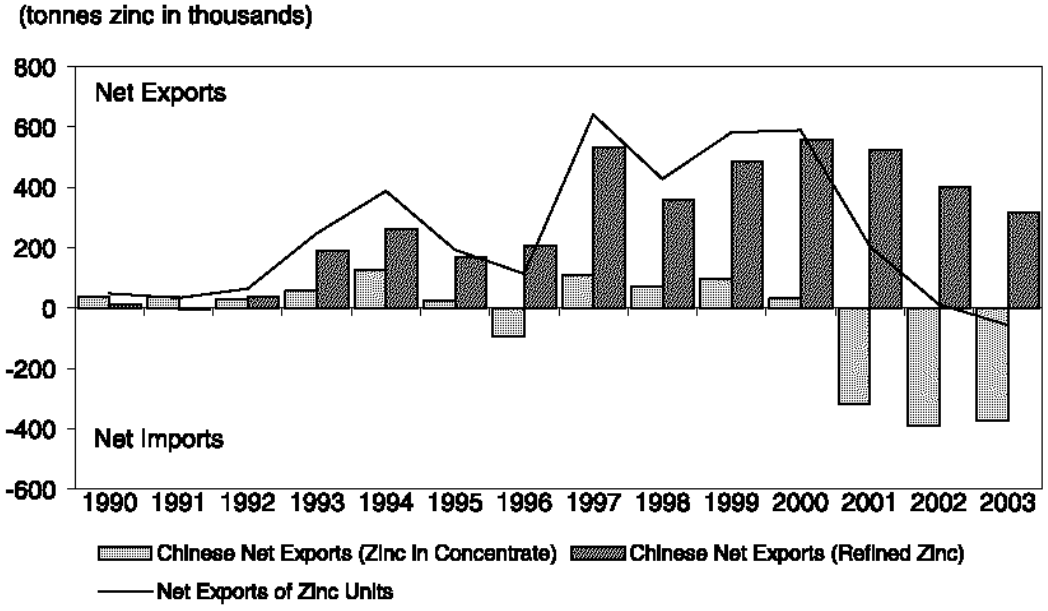
Zinc Consumption Per Capita Against GDP Per Capita



Source: Brook Hunt

China's zinc consumption has grown at a compound annual rate of 12% for the last five years, accelerating in 2003 to 16%. Brook Hunt forecasts that a more conservative 9% growth rate is expected in 2004, although recent history suggests that there may be upside to that forecast. In early 2003, China became a net importer of zinc units with concentrate imports exceeding metal exports, which were declining, as shown in the diagram below.

Historical Chinese Net Exports of Zinc in Concentrates and Refined Zinc



Source: Brook Hunt

Trends in the Supply of Zinc

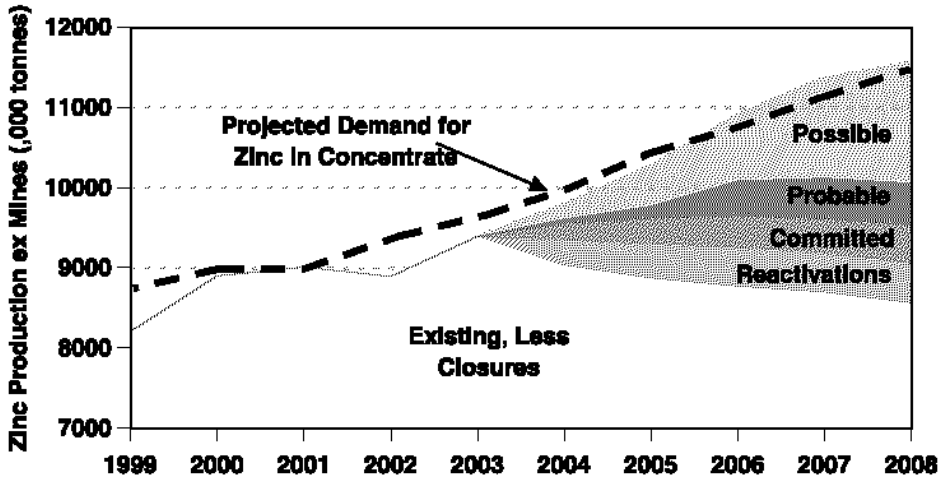
Mine Production

Global mine production grew at an annual average rate of 2.8% over the last decade, from 6.9 million tonnes per year in 1990 to a peak of 9.5 million tonnes per year in 2003 following the reactivation of capacity that had been closed in 2001/2002. Continuing low zinc prices in the mid to late 1990s were a disincentive to exploration and project advancement, with resource companies seemingly preferring to invest in the copper and gold sector. Nonetheless, the period saw the development of some of the world's largest zinc mines, Red Dog, Century, Antamina, Lisheen and Francisco I. Madero, together representing about 15% of world output.

Three contiguous factors, the economic recession in the United States, a large tonnage of new mine production and a plentiful supply of smelter capacity, created a surplus refined market from 2001with the zinc price falling steadily to average US$885 per tonne (40 US cents per pound) in 2001 and US$779 per tonne (35 US cents per pound) in 2002. As a result, there was a curtailment of mine output late in 2001 that continued into 2002 as mines were shut temporarily or permanently, leading to a cumulative loss of some 530,000 tonnes per year of zinc mine capacity. Total world output was down only slightly because incremental output from new mining operations almost entirely offset the lost production.

Brook Hunt forecasts that global mine production will increase steadily from 9.5 million tonnes per year in 2003 to 11.6 million tonnes per year in 2008. Our research suggests that the increase in mine production during this period will emanate from the sources represented in the diagram below.

Zinc Mine Production Forecast (kt Zinc)



Source: Zinifex

To meet the requirement for extra mine capacity this decade, it is likely that new production will come mostly from deposits that have already been identified. Some of these have been advanced substantially and are classed as "committed" projects or "probable" producers, with the potential to produce up to 1.0 million tonnes per year zinc in concentrate. Others, which are less advanced in respect of ore reserve definition, feasibility study and permitting, are classified as: "possible" producers. It is apparent that mine production will be stretched to meet metal consumption, with most of the "possible" producers required to come on stream to satisfy demand growth. Thus, concentrate markets are forecast by Brook Hunt to remain tight in the near term.

Smelter Production

Global smelter production grew at an average rate of 3.3% per year over the last decade, from 6.7 million tonnes per year in 1990 to 9.3 million tonnes per year in 2001. Significant increases in output came from Australia, Brazil, Mexico, Spain, the Commonwealth of Independent States and, in particular, China. New smelters and expansions were commissioned in China with annual output increasing by 1.5 million tonnes per year between 1991 and 2001, as five smelting groups expanded output substantially. Smelter output increased further to 9.7 million tonnes per year in 2002 and to 9.8 million tonnes per year in 2003. A number of operations closed because of low metal price and treatment charge income. The cumulative loss of capacity over the last three years was about 0.8 million tonnes per year, of which 0.23 million tonnes per year were permanent closures, but this was offset by increased output at other operations.

Currently planned increases at existing smelters and committed new smelters will increase world smelter capacity by 5% per annum to 11 million tonnes per year by 2006. The annual market demand for refined zinc and available raw material supply will be lower than this and smelters will not be able to operate at capacity until 2007. Thereafter, new capacity will be required to meet continued growth in demand for refined metal. Brook Hunt forecasts that the requirement for new annual capacity will be 0.15 million tonnes per year in 2008.

The most common reason for expansion of smelter capacity is to preserve or increase profit margin by reducing zinc unit costs through economies of scale. The second reason, most evident in developing economies, is to meet increased domestic or regional demand for zinc. Consequently, there are many new or expansion projects that are under active consideration. In total, projects classified by Brook Hunt as probable could provide additional capacity of up to 0.65 million tonnes per year and projects classified as possible could provide additional capacity of up to 2.5 million tonnes per year by 2008. Historical and forecast zinc production from mines and smelters is shown below.

Historical and Forecast World Zinc Supply (kt Zinc)

	Historical					Forecast				
	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008
Mine Production	6,913	8,998	9,144	9,107	9,556	9,491	10,033	10,513	11,166	11,565
Smelter Production ..	6,721	8,942	9,308	9,692	9,831	9,728	10,244	10,661	11,183	11,384

Source: Brook Hunt

Dynamics of Zinc Metal and Concentrate Pricing

Demand for zinc metal changes with industrial activity. Historically, supplies of zinc metal and zinc concentrates have reacted only slowly to changes in market demand, metal prices and treatment charges and so there can often be large annual swings in the balance between supply and demand.

When a mine sells concentrate to a smelter, the mine will be paid for a portion of the metal contained in concentrate at the LME price averaged over a quotational period. The smelter will charge the mine a treatment charge ("TC"). The level of this charge is normally negotiated annually and fluctuates depending on the supply and demand conditions in the concentrate market. Over the last 25 years, the zinc concentrate treatment charge has averaged 37% of the gross zinc revenue received by the mine within a range from 32% to 47%. Typically, zinc mine revenue is most sensitive to changes in the zinc metal price and less sensitive to changes in the TC.

Smelters sell recovered zinc to consumers based on the LME price plus a premium. The premium reflects the service provided by the smelter in delivering zinc of a size, shape or quality specific to customers' needs, as well as the supply-demand conditions prevailing in the regional market. While the precise values will vary with time according to the relationship between zinc prices and treatment charges, a typical electrolytic smelter will obtain roughly 70% of its revenue from treatment charges ("TCs"), 20% from net zinc metal sales and 10% from by-product credits. Therefore, the revenue of zinc smelters is generally most sensitive to changes in the TC and less sensitive to changes in the zinc metal price.

Annual TCs are agreed in advance of the contract year based on expectation of future market conditions. The benchmark TC contract represents the typical terms agreed by the major buyers and sellers of concentrate. A TC comprises two elements, a base TC in US dollars per tonne of concentrate at an agreed zinc price. At delivery, if the actual zinc price is different to the base zinc price, the TC is increased or deceased by an agreed amount to give a realised TC.

A summary of product price premiums that are typically paid to producers in various geographical markets relative to the LME SHG quote is provided in the table below. This data is indicative of calendar year 2003.

Producer Premiums by Product	Market	Premiums relative to LME (in US$/t)
Special High Grade (SHG)	Far East - China	30-40
	Far East - Western	65-75
	Europe - Spot	115-120
	Europe - Warehouse	80-85
	USA - Spot	65-75
Continuous Galvanising Grade (CGG)	Europe	130-170
	USA	75-80
Diecasting Grade	Far East/China	170-210

Source: Brook Hunt, Zinifex

Historical World Zinc Supply and Demand

Global supply and demand were in balance from the period from 1998 through 2000, but worries about the proven ability of China to increase production and exports rapidly, prevented the development of any serious upward movement in price. The fortunes of zinc changed dramatically through 2001, moving quickly from a deficit market, with high prices and declining stocks in the first quarter of 2001, to a much weaker market in the fourth quarter, reflected in tumbling prices and increasing inventories. Some historical supply and demand data is shown in the table below.

Historical World Zinc Supply and Demand (kt Zinc)

	1995	2000	2001	2002	2003
Mine Production	6,913	8,998	9,144	9,107	9,556
Change in Concentrate Stocks (+increase, -decrease)	-127	223	-43	-365	18
Zinc in Concentrate Smelted	7,033	8,771	9,183	9476	9,534
Add zinc in residues and secondaries	523	588	565	645	649
Less smelter processing losses	467	516	535	529	524
Add zinc recovered from secondary plants	217	99	95	108	100
Add DLA stock release	17	39	24	5	10
Smelter Production including DLA Sales	7,324	8,981	9,332	9,702	9,841
Refined Consumption	7,676	8,965	8,948	9,322	9,714
Change in Metal Stocks (decrease (-) or increase (+))	-352	16	384	375	127
Estimated total metal stocks	1,948	1,669	2,053	2,425	2,552
In equivalent days of consumption	93	68	84	95	96
Reported LME stocks	665	194	433	651	750

Source: Brook Hunt

Smelter production cuts in response to poor market conditions began in 2001. Chinese smelters, which had become much more reliant on imported concentrate, were the most vulnerable to low treatment charges with temporary closures and cutbacks removing 0.34 million tonnes from the market. Spot and annual treatment charges declined again in 2003, contracting smelter profit margins even further. Three ISF smelters were closed permanently, Noyelles Godault in France, Avonmouth in the United Kingdom and Cockle Creek in Australia. In total, temporary and permanent closures represented 0.4 million tonnes of annual capacity, approximately six times the average closure rate of the previous ten years.

Mine production cuts in response to declining metal prices commenced in early 2001 with the closure of five operations together removing about 110,000 tonnes per year zinc in concentrate from the market. Altogether, cumulative production cuts were 0.5 million tonnes per year from 2001 to 2003, of which 0.37 million tonnes per year were permanent closures. Despite these supply-side adjustments, the zinc metal market remained oversupplied in 2002 recording an implied surplus of 375,000 tonnes and LME stocks increased by 50%, ending the year at 651,000 tonnes. World metal output remained stable at 9.8 million tonnes per year in 2003, whereas demand for zinc increased by 4% to 9.7 million tonnes per year as compared to 9.3 million tonnes per year in 2002.

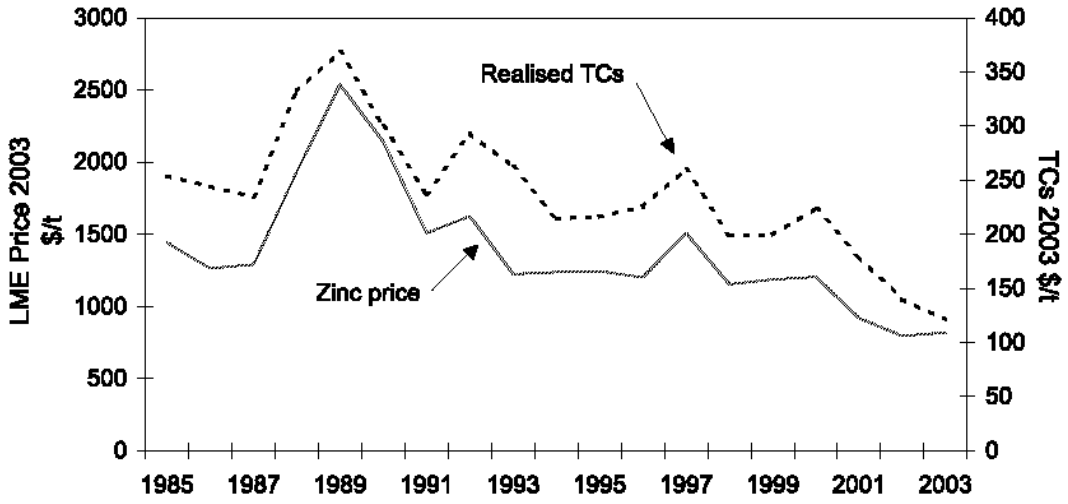
A substantial increase in mine production created large concentrate surpluses in 1999 and 2000, which swung to deficit in 2001 and 2002 because of increased smelter capacity. The large stocks of concentrates that had been built up in 1999 and 2000 were run down over this period so that a balanced market in 2003 nonetheless represented a very competitive pricing environment.

The table and graph below set out historical LME zinc metal price and benchmark zinc concentrate treatment charges as current (nominal) prices and as adjusted for US$2003 values (real).

Historical Zinc Metal Prices and Treatment Charges

	1985	1990	1995	2000	2001	2002	2003
LME Price:							
Nominal (US$/t)	844	1,519	1,031	1,128	885	779	828
Real 2003 US$ (US$/t)	1,443	2,139	1,244	1,204	919	797	828
Real 2003 US$ (US c/lb)	65	97	56	55	42	36	38
Realised TC (US$/t concentrate)							
Nominal US$	148	213	179	210	173	137	122
Real 2003 US$	254	300	216	224	179	140	122

Historical Zinc Price and Concentrate Treatment Charges (US$ Real)



Source: Brook Hunt

Forecast World Zinc Supply and Demand

Mine production from existing producers and committed projects is forecast by Brook Hunt to grow at an average annual compound rate of 2% between 2003 and 2008. Eight new mines and four reactivations are included in the forecast but most of the incremental tonnage comes from expansion projects. In order to meet forecast market demand for concentrate, it is necessary to include an allowance for new mine production that cannot at this stage be identified to individual mines or projects. An allowance of 240,000 per year in 2006 rising to 1,100,000 tonnes per year in 2008 is based on a list of advanced stage "probable projects".

Smelter capacity from existing producers and committed projects is expected to increase at an average annual rate of 3.7% between 2003 and 2008. Six new smelters are included, of which four are in China. Further incremental tonnage comes from recently commissioned operations in Kazakhstan and Namibia, the reactivation of underutilised capacity, mostly in China, and a number of expansions both there and elsewhere in the world. The growth in smelter capacity outstrips the growth in mine production and actual smelter output will, therefore, be constrained by the availability of concentrate. New smelter output of 150,000 tonnes per year over and above that already included in the production capability forecast is required in 2008. There are many smelter projects in the "probable" and "possible" categories from which this can be drawn.

Economic recovery in the main industrial countries plus healthy growth in the rest of the world, especially in China and other Asian countries, will ensure that global demand for refined zinc expands steadily in the near term. Brook Hunt forecast 4.6% annual average compound growth in consumption for the five years to 2008. The concentrate market will be in relative balance over the next two years and since stocks have already been drawn down to a low level this represents a continuing tightness of the concentrate market.

Brook Hunt's forecast demand and supply of refined zinc metal and concentrate is shown below.

Forecast World Zinc Supply and Demand (kt Zn)

	Forecast				
	2004	2005	2006	2007	2008
Brook Hunt Base Case					
Mine Production	9,491	10,033	10,513	11,166	11,565
Change in Concentrate Stocks (decrease (-) or increase (+))	2	22	76	179	366
Zinc in Concentrate Smelted	9,489	10,008	10,443	10,984	11,195
Add zinc in residues and secondaries	653	689	706	706	706
Less smelter processing losses	530	566	592	620	630
Add zinc recovered from secondary plants	105	105	105	105	105
Add DLA stock release	10	10	10	19	0
Refined Supply	9,728	10,246	10,663	11,194	11,376
Refined Consumption	10,039	10,419	10,807	11,138	11,614
Change in Metal Stocks (decrease (-) or increase (+))	-312	-173	-145	56	-238
Estimated total metal stocks	2,216	2,043	1,898	1,954	1,716
In equivalent days of consumption	81	72	64	64	54

Source: Brook Hunt

Forecast Zinc Metal Prices and Treatment Charges

The refined zinc market is forecast by Brook Hunt to move into substantial deficit in 2004 and to remain so until 2006 by when stocks accumulated over the last two years will have been reduced to more normal levels. This creates the necessary economic conditions for the zinc price to move substantially higher to reach a cyclical high of US$1,565 per tonne (71 US cents per pound) in 2008. Thereafter, Brook Hunt forecasts four years during which the zinc price will move progressively lower to reach a cyclical low in 2012 of US$996 per tonne in real terms or US$1,190 per tonne (54 US cents per pound) nominal. The ten-year period average from 2002 to 2012 (trough to trough) is US$1,092 per tonne (50 US cents per pound) in real terms or US$1,188 per tonne (54 US cents per pound) nominal. The accompanying tables set out Brook Hunt's base case zinc metal price and zinc concentrate treatment charge forecasts.

Forecast Zinc Prices

	Forecast (Calendar Years)				
	2004	2005	2006	2007	2008
LME Price: US cents/lb					
Nominal US cents	47	52	59	65	71
Real 2003 US cents	46	50	56	60	64
LME Price: US$/tonne					
Nominal US$	1,042	1,124	1,301	1,433	1,565
Real 2003 US$	1,021	1,080	1,226	1,324	1,418

Forecast Zinc Treatment Charges

	Forecast (Calendar Years)				
	2004	2005	2006	2007	2008
Contract TCs (US$/t concentrate)					
– Nominal US$	147	152	163	147	137
– Real 2003 US$	147	152	163	147	137
Realised TCs (US$/t concentrate)					
– Nominal US$	154	175	211	215	226
– Real 2003 US$	151	168	199	199	205

Contract TCs are quoted at a basis price of US$1,000/t.

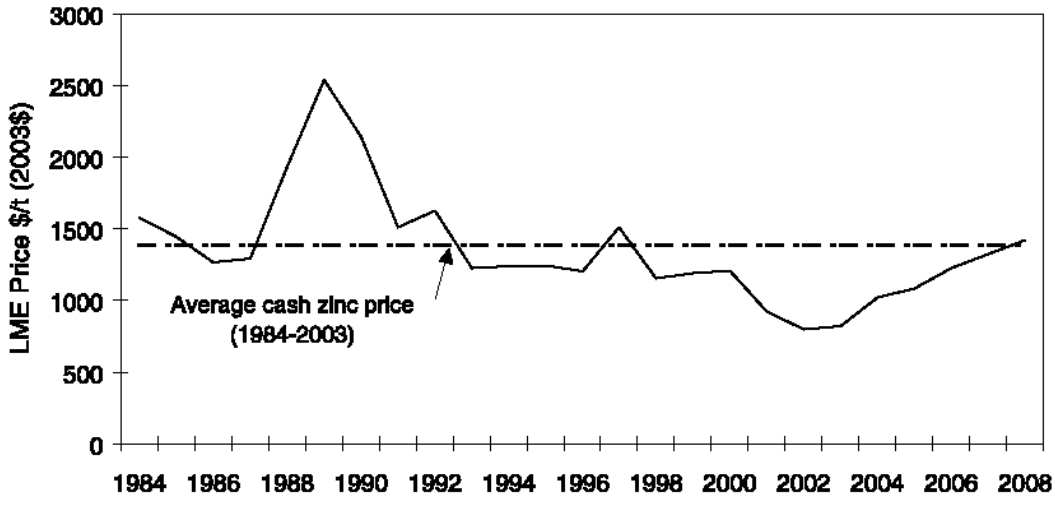
Realised TCs are quoted at the Brook Hunt forecast zinc price and escalated relative to the Contract TC to the extent that forecast prices are above or below the basis price of US$1,000/t. The escalation factors are +0.16 and – 0.14 times the US$ per tonne difference between the forecast price and the basis price.

Source: Brook Hunt

Brook Hunt does not provide exchange rate forecasts that allow the conversion of these prices to Australian dollars.

The graph below illustrates historical zinc cash prices and Brook Hunt's forecast zinc cash prices in real US dollars.

Historical and Forecast Zinc Cash Prices (Real 2003 US$)



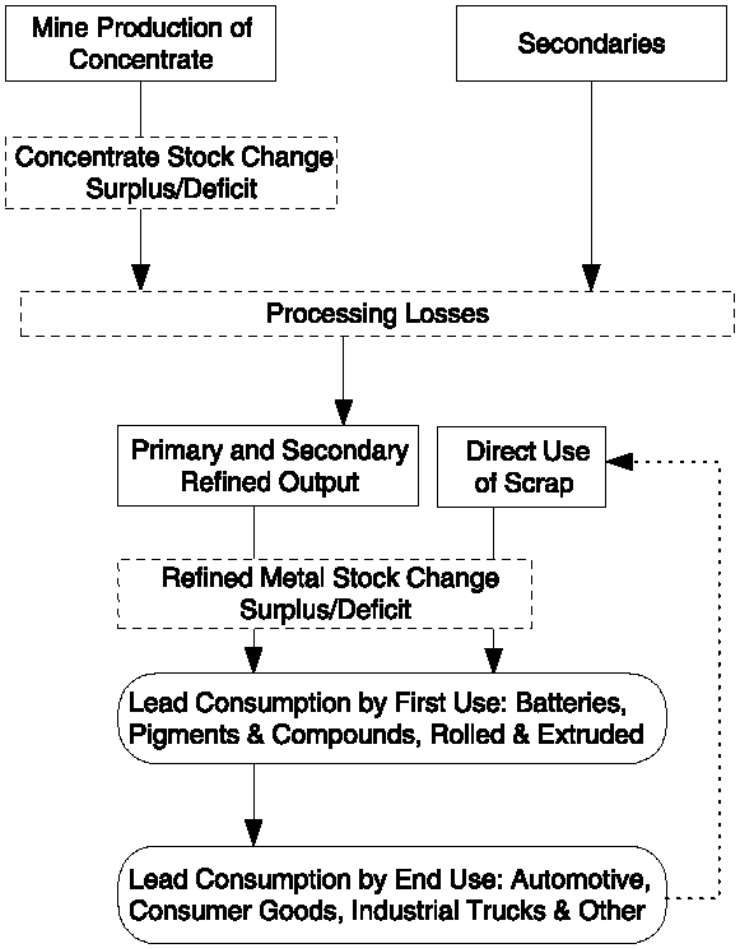
Source: Brook Hunt

Lead Overview

Lead is a soft metal with low strength, meaning that it can be easily rolled. It is extremely durable, and has good corrosion resistance, making it a popular choice in acidic environments. It has a very high density, and is a poor conductor of electricity. The global market for refined lead was 6.7 million tonnes in 2003. This includes

both primary refined lead (40% of the total) and secondary refined lead (60% of the total). Primary lead is produced by conversion of ore to lead concentrate and then to lead bullion and finally refined metal. Secondary refined lead is produced from lead-containing scrap and waste, of which the largest proportion comes from scrap lead-acid batteries. Refined lead is generally produced to meet LME specifications, which requires a minimum lead grade of 99.97% lead. Other common grades include 99.985% lead and 99.99% lead. The process from mining and extraction through to the end user is depicted by the lead market flow diagram below.

Lead Market Flow Diagram



Source: Brook Hunt

In nearly all cases, mines produce lead concentrate that is then sold to a lead smelter for conversion into bullion. Custom smelters charge the mine a treatment charge for converting concentrate into bullion. The level of treatment charge is normally negotiated annually between the mines and smelters, and fluctuates depending on supply and demand conditions in the concentrate market. The realised treatment charge is also dependent on the LME price for refined lead through a price participation element, although the miner is more exposed to fluctuating refined metal prices than the smelter.

Trends in Demand for Lead

Over several decades, global lead consumption growth rates have been lower than the other major base metals. The principal reason for this relative underperformance is that for many years all of lead's end uses,

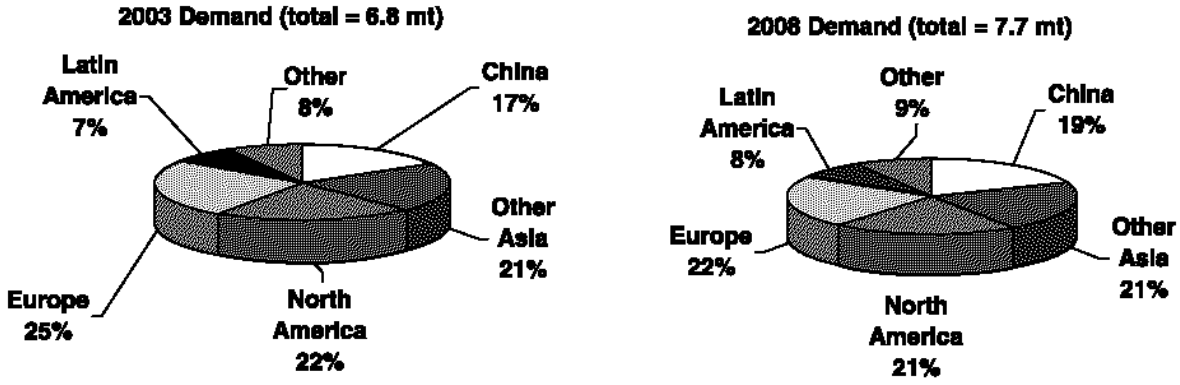
except one, have been under sustained pressure on environmental grounds. The one growing end use has been in automotive and industrial batteries. In fact, taking lead consumption growth in batteries alone the annual average increase over the 1990s has been strong at 3.9%. Over the same period, lead consumption in batteries as a share of total demand has increased from 64% to 74%.

In 2003, batteries accounted for 75% of global lead consumption. Within this total, there are two main areas of use - automotive batteries and industrial batteries. Lead's use in automotive batteries largely reflects the growth in the size of the world's vehicle fleet. While year-to-year changes in the rate of new vehicle production do have an impact on lead demand, it is sales of replacement units, outnumbering deliveries of original equipment by four to one in some mature markets, which largely determine the overall volume of lead consumption in batteries. Over the medium term, changes in the quality of batteries have an impact on battery lives and, hence, the requirement for replacement units.

The industrial battery sector includes two types of applications – stationary and traction. Stationary batteries are used to provide back-up power in a variety of situations including for computer systems and telecoms networks. Growth in this area largely depends on corporate investment decisions in these markets. Traction batteries are largely used to power forklift trucks, and demand tends to vary with the more general investment cycle.

Brook Hunt's forecasts for lead demand growth reflect the impact of the economic business cycle and growth has been significantly below trend in 2002 and 2003. Allowing for that economic slowdown and that the demand for lead is dependent on a number of factors that make it difficult to accurately predict future lead demand, Brook Hunt expects global refined lead consumption to grow by 2.5% per annum between 2003 and 2008. Equally, future demand for lead may be slowed by any changes in regulatory response to health concerns on the production and usage of lead. The historical and forecast consumption percentages of lead by geographical markets are shown in the diagram below.

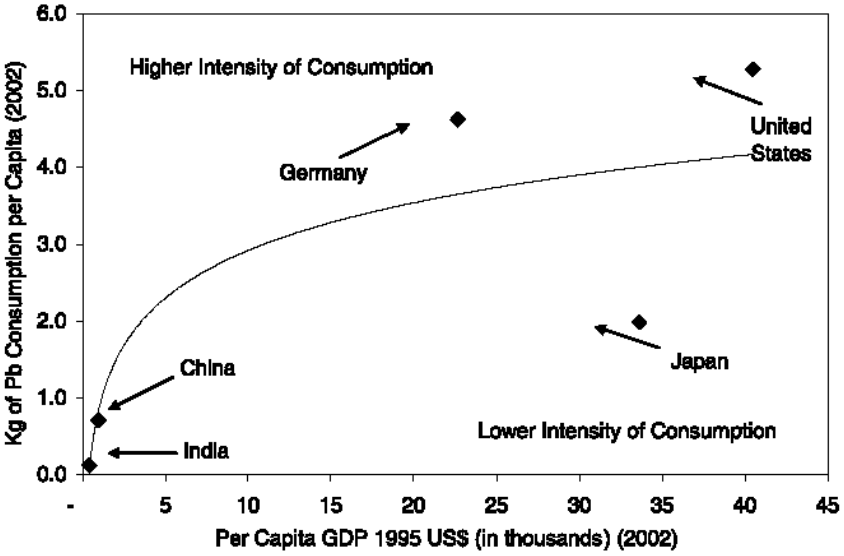
Historical and Forecast World Refined Lead Consumption (kt Lead)



Source: Brook Hunt

Forecast growth rates vary significantly between regions. The developed economies of North America and Europe are expected to grow modestly at 0.4-1.0% per year, while growth in Asia (excluding Japan) and China of 4.0% per year and 5.0% per year respectively, is forecast during the period to 2008. China has entered a period of rapidly accelerating intensity of lead usage that is primarily driven by consumer demand for motor vehicles and telecommunications and information technology infrastructure. Its position on the growth curve is compared with other economies in the diagram below.

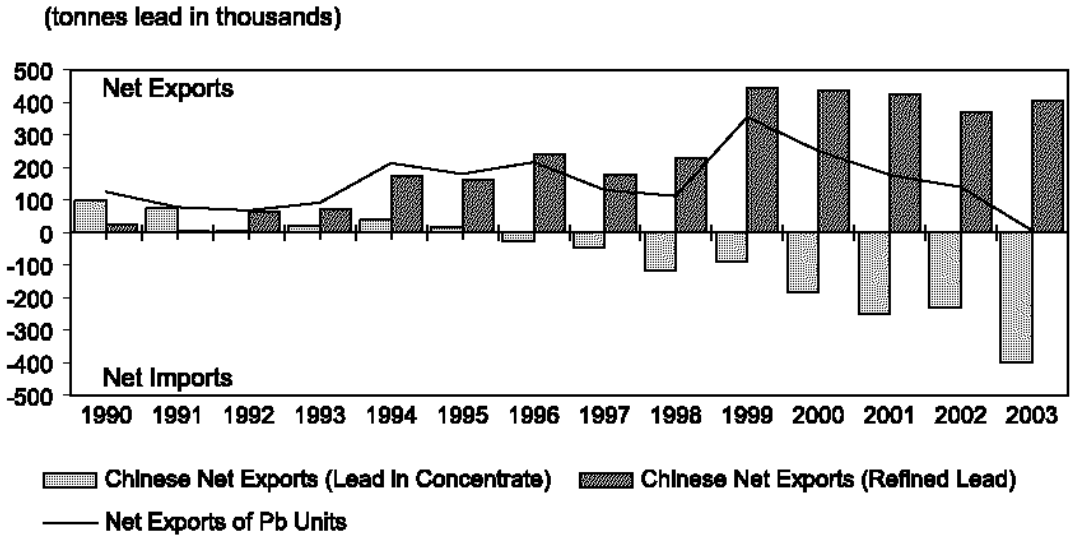
Lead Consumption Per Capita Against GDP Per Capita



Source: Brook Hunt

China's lead consumption has grown at a compound annual rate of 17% for the last five years, accelerating in 2003 to 25%. Brook Hunt forecasts that a more conservative 8% growth rate is expected in 2004, although recent history suggests that there may be upside to that forecast. In 2003, China became a net importer of lead units with concentrate imports exceeding metal exports, as shown in the diagram below.

Historical Chinese Net Exports of Lead in Concentrates and Refined Lead



Source: Brook Hunt

It is expected that most of the growth in lead consumption will occur in the battery sector, which is forecast to rise at an average of 2.6% per annum. This compares with an average growth rate of 3.9% per annum seen over the past ten years. Replacement and original equipment automotive demand will continue on an upward trend, in line with the growth in vehicle populations. It is expected that the fastest growth will occur in the industrial battery market, with the spread of telecommunications being one factor that should boost the requirement for back-up power systems. It is expected that the automotive sector will also be helped by the widespread introduction of 42-volt batteries into cars in the next few years, which will require considerably more lead than the 12-volt batteries used at the moment.

Lead competes with a variety of different materials in its end-use markets. In the battery sector, there are essentially no competitors in automotive applications that represent an immediate threat, although nickel-metal hydride batteries are being used increasingly in hybrid cars. Once 42-volt batteries are introduced in cars, rival technologies such as nickel and lithium-based units will be used more widely, but lead-acid is likely to dominate the automotive battery market at least for the next decade.

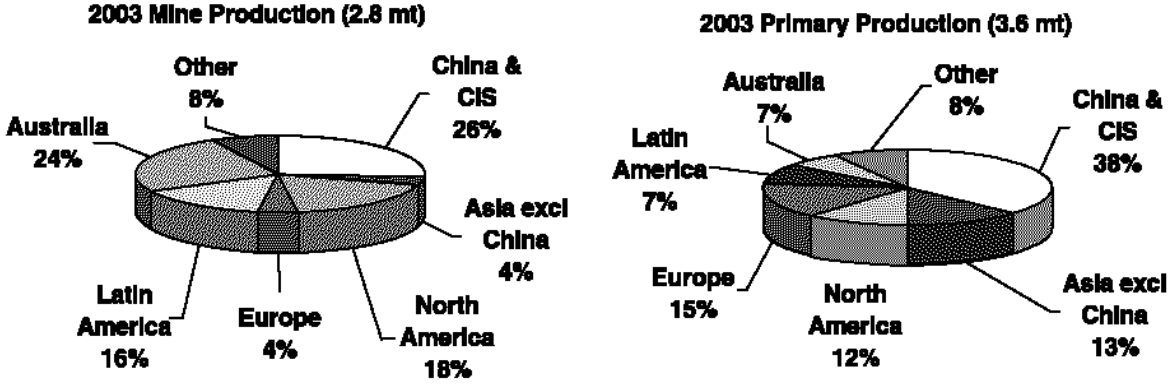
In the industrial battery sector, lead faces a number of competing technologies. For forklift trucks, nickel-cadmium batteries and diesel engines are used widely. However, lead-acid provides a low cost, low emission alternative and is likely to remain very popular for many applications. In the stationary battery market, lead-acid provides a very reliable cheap alternative, and this sector should be buoyed by the expansion of computer networks and the need for back-up power.

The non-battery sector has for several years been under pressure from the environmental lobby, although lead is now concentrated in areas where substitution is impractical, unnecessary or prohibitively expensive. It is expected that this will make lead more difficult to displace than has occurred in the past.

Trends in Supply of Lead

Global growth in lead mine output has been constrained in recent years by the lack of either "greenfield" or "brownfield" development. Over the period 1977 to 2000, global lead mine production grew by only 2.5% per annum compared with zinc where, over the same time frame, mine output growth was more than double at 5.7% per annum. Furthermore, there was a significant loss of concentrate output in 2001 and early 2002 due to the closure of some large lead-producing mines due to reserve depletion. This resulted in a shortfall in feed supplies to primary smelters and has encouraged greater use of secondary materials where possible. Brook Hunt expects some modest growth in mine production, with a forecast increase in production from 2.8 million tonnes per year in 2003 to 3.2 million tonnes per year in 2008. The concentrate market is expected to remain tight over this period. Historical lead mine and refined lead production by country or geographical region are shown in the diagrams below.

Historic Lead Mine and Refined Production (kt Lead)



Source: Brook Hunt

The shortage of lead concentrate has been looming for some time, as the metal price environment in recent years has provided little encouragement to companies to advance new mine projects. Moreover, new mines that have been brought into production recently, such as Antamina, Century and Lisheen, have low lead to zinc ore grades, and have not added significantly to lead concentrate output. China is another key factor contributing to tightness in the concentrate market, with smelter production rising rapidly while mine production has been stagnant. Given current expectations for continued smelter expansion in China, Brook Hunt expects a steady increase in Chinese imports of lead concentrate over the next few years.

Due to this lack of concentrate, there are few advanced greenfield primary smelter projects of any significant size, with investment interest in the lead smelting industry remaining low. Lead is somewhat different from the other major base metals with a high percentage of metal recycled. In recent years, there has been a big increase in the volume of lead recovered by primary smelters from feed other than lead or bulk concentrates. Brook Hunt expects that the volume of lead scrap generated each year will grow significantly, both because the share of non-dissipative uses, such as batteries, is increasing as a percentage of all end uses and because of the expected increase in recycling rates, especially in emerging economies.

In recent years, global refined lead production has grown from 5.8 million tonnes per year in 1996 to 6.8 million tonnes per year in 2003. The main area of growth has been Asia, particularly in China and South Korea, while other regions have seen modest decline in production. Brook Hunt expects China to be the main focus for capacity increases over the next few years.

Lead Supply/Demand Balances and Price Outlook

The global refined metal market picked up in 2003 after the global economic slowdown in 2001 and 2002 impacted on investor sentiment, leading to a drop in consumption. In 2003, an increase in production was outweighed by an increase in consumption and LME stocks have dropped substantially as a result. Historical and forecast lead supply and demand balances are shown in the table below.

Historical and Forecast Global Lead Supply and Demand (kt Lead)

	Historical				Forecast				
	2000	2001	2002	2003	2004	2005	2006	2007	2008
Actual/Forecast Mine Production [1]	3,039	3,053	2,789	2,782	2,823	3,039	3,115	3,162	3,185
Concentrate Stock Changes	-145	71	-126	-81	6	27	77	127	156
Cumulative Concentrate Stock Change	424	495	369	288	294	321	398	524	680
- days of requirement	49	61	46	37	38	39	48	63	82
Production at primary refineries	3,742	3,576	3,602	3,567	3,634	3,811	3,840	3,840	3,840
- from lead, bulk concentrates	2,984	2,790	2,727	2,675	2,630	2,812	2,836	2,833	2,828
- from residues and scrap	758	786	875	892	1,004	999	1,004	1,007	1,012
Production at secondary refineries	2,932	2,999	3,018	3,199	3,347	3,399	3,534	3,732	3,979
Total Refined Lead Supplies [2]	6,706	6,615	6,640	6,779	6,981	7,209	7,373	7,571	7,818
Refined Lead Consumption	6,685	6,583	6,639	6,841	7,058	7,183	7,352	7,535	7,726
Change in Metal Stocks (decrease (-) or increase (+))	21	31	0	-62	-58	51	46	61	117
Implied Stocks	1,023	1,055	1,055	993	935	986	1,032	1,093	1,210
- in days of consumption	56	58	58	53	48	50	51	53	57

[1] Net of metallurgical losses.

[2] Including supplies from DLA stocks.

Since 1980, lead prices have been fairly volatile, with a few years of subdued prices tending to be interspersed with sharp spikes. Since the start of 1997, the lead price has moved in a range from US$412-634 per tonne (19-29 US cents per pound) on a monthly average basis and the cash price averaged US$506 per tonne (23 US cents per pound) from 1997 to 2003. Historical lead prices are shown in the table below.

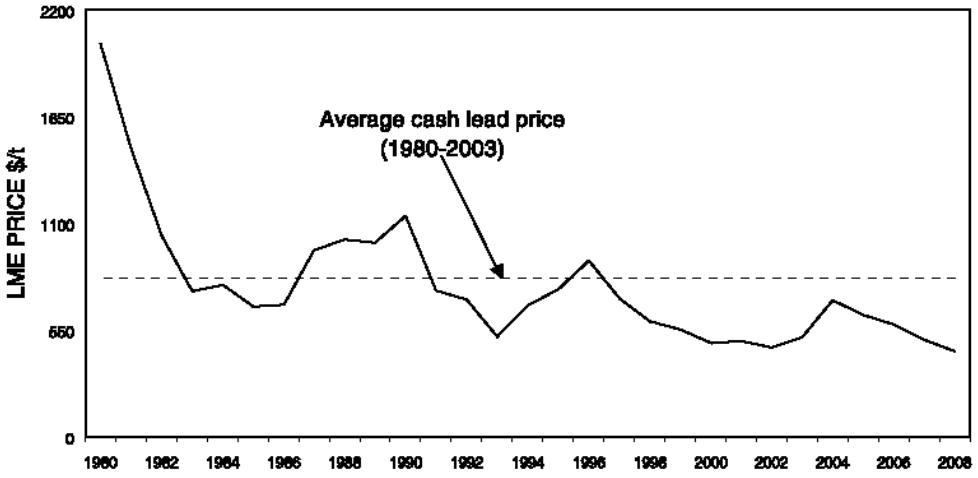
Historical Lead Prices

	Historical						
	1985	1990	1995	2000	2001	2002	2003
LME Cash Price: US$/tonne							
Nominal US$	394	817	631	454	476	452	515
Real 2003 US$	673	1,139	761	484	494	462	515

Source: Brook Hunt

Historical lead prices and Brook Hunt's forecast lead prices, both of which are shown in real US dollars, are set forth in the chart below.

Historical and Forecast Lead Prices in 2003 US$ (Real)



Source: Brook Hunt

In 2004, Brook Hunt expects consumption growth to remain strong, which is expected to help keep the market in deficit. Estimated total stocks are likely to fall to low levels of around 50 days of consumption. Lead prices are forecast to rise steadily during this period. In 2005, Brook Hunt expects the market to return to a small surplus, as strong consumption growth is offset by increased production.

In the lead concentrate market, the picture is rather different. The market has been very tight for the past couple of years, with spot TCs at low levels in both 2002 and 2003. Falls in lead mine production have led to significant cutbacks in primary lead smelting, and the amount of scrap treated at primary plants has been rising.

Even allowing for these significant cutbacks in smelter capacity, the lead concentrate market is expected to remain extremely tight for the next couple of years, which will maintain downward pressure on contract TCs for the medium term with little or no expectation of a substantial rise in TCs from today's level of around US$115 to

US$155 per tonne. A return to more normal market conditions is likely for the rest of the decade, when new mine capacity should come on stream. At this stage, however, this extra capacity cannot be identified to individual probable or possible projects. This will then result in a return to a more traditional level of TC.

The table below sets forth the forecast LME lead metal prices as current (nominal) US dollar prices and as adjusted for real US dollar prices.

Forecast Lead Prices

	Forecast (Calendar Years)				
	2004	**2005**	**2006**	**2007**	**2008**
LME Price: US cents/lb					
Nominal US cents	32.6	29.7	27.9	24.5	22.0
Real 2003 US cents	31.9	28.6	26.3	22.7	20.0
LME Price: US$/tonne					
Nominal US$	718	656	616	541	486
Real 2003 US$	704	630	580	500	440

Source: Brook Hunt

Brook Hunt does not provide exchange rate forecasts that allow the conversion of these prices to Australian dollars.

BUSINESS

Overview of Our Company

We are one of the world's largest integrated zinc and lead producers, supplying 6% and 4% of global demand for finished zinc and lead metal, respectively, during fiscal year 2003. We enjoy significant scale in both our mining and smelting operations, being the second largest zinc mining company and the second largest zinc smelting company in the world in terms of tonnes of metal produced in fiscal year 2003. We are also a major producer of lead, being the fifth largest lead mining company and the third largest primary lead smelting and refining company in the world in terms of tonnes of metal produced in fiscal year 2003. Our major products are zinc and lead metal. Zinc is used primarily in steel galvanising and diecasting, and lead is used primarily in the production of lead acid batteries.

We are a global business headquartered in Melbourne, Australia, and our products are distributed to a broad geographic base of users. We have production facilities in Australia, The Netherlands and the United States. More than 80% of our products are distributed outside Australia, particularly in Asia, which has been experiencing significant growth in construction activity and vehicle production. We believe that we have a competitive advantage with our value-added product offerings and our presence in the markets that we serve. One of our principal product strategies is to increase the volume of value-added products we produce, principally diecasting and other zinc alloys that generate higher price premiums than our commodity products.

Our most significant mining operation is the open-cut Century mine in Queensland, Australia, which produces zinc and lead concentrates. Century mine is among the largest and most commercially attractive zinc mines in the world given its well-defined, accessible ore body and low cost of production. Century mine is currently operating at full capacity and, based on our current expectations, we estimate that Century's remaining mine life will be approximately twelve years.

We also operate the Rosebery mine in Tasmania, Australia. Rosebery is a medium-sized underground mine that produces zinc, lead, silver, gold and copper. Rosebery's cash costs are relatively low after we credit by-product revenues. We estimate that Rosebery's remaining mine life will be at least six years based on two years of reserves and our current expectations regarding the future conversion of inferred resources to reserves.

We own and operate two primary smelters in Australia – the Hobart electrolytic zinc smelter and the Port Pirie lead and zinc smelter. We also operate one of Europe's largest and most efficient zinc smelters at Budel in The Netherlands, and an electrolytic zinc smelter in Clarksville, Tennessee in the United States. In addition, we participate in the lead recycling business through a joint venture that operates small secondary smelters in Sydney and Melbourne in Australia.

We are a highly integrated producer, with our Century and Rosebery mines providing a stable and secure source of zinc concentrate feed for our Hobart, Clarksville and Budel smelters and lead concentrate feed for our Port Pirie smelter. Our integrated nature assists us to maintain high smelter utilisation and partially insulates us from periodic shifts in concentrate treatment charge terms between mines and smelters.

We have been formed to own and operate certain assets that were owned and operated by Pasminco Limited prior to completion of this Offering. As part of the restructuring that creates the Zinifex group, certain environmental liabilities (other than liabilities to the government) for events occurring prior to 20 September 2001 affecting companies in the Zinifex group that were subject to deeds of company arrangement, will no longer be the responsibility of Zinifex. We have assessed our environmental liabilities and risks and are proactively managing them. We have provided for our expected environmental compliance costs in our accounts and our assessment of asset carrying values.

We have been established with a conservative funding structure. Upon the completion of this Offering, our debt will be approximately A$180 million, which primarily relates to a loan secured by the assets of the Zinifex group. Our cash position on 1 April 2004 is expected to be A$66 million resulting in net debt of A$114 million.

Business Strengths

Our business results will benefit from rising zinc and lead metal prices.

Zinc and lead prices in US dollars have moved up from their cyclical lows during the last 12 months by approximately 40% and 100%, respectively, although the increases have been substantially less in Australian dollar terms. We believe that the strength of Chinese industrial demand, the recovery in the U.S. economy and US dollar currency weakness have been the primary drivers behind the recent increases in these metal prices. As we currently do not hedge metal prices and currency exchange rates, our earnings and cash flows are highly sensitive to movements in both zinc and lead prices and the A$/US$ exchange rate, with an A$25 per tonne increase in zinc and lead prices generating approximately A$17.2 million and A$3.4 million of additional annual EBITDA (as defined below), respectively. Accordingly, we believe that we are well positioned to benefit from any further increases in zinc and lead prices.

Our management team has delivered significant and broad improvements in the Company's performance.

For the past two and a half years, our management team has been managing all of the assets that will make up the Company following completion of the Offering. During this period, our management team has effectively transformed the performance of these assets and the culture of the people working them to create a significantly improved and sustainable business. This is demonstrated by the substantial improvements in operational efficiency and production output of these assets without additional significant growth in capital investment. Under our management team's leadership, the Company's operations have generated cash during the recent cyclical low of the zinc and lead commodity price cycles during fiscal year 2003.

We have a portfolio of well-positioned assets.

Our asset base consists of operations that are highly leveraged to commodity price movements. The majority of our assets are located in Australia and supply growing industrial markets in the Asia-Pacific region, including China. This region consumes 46% of world zinc demand and is forecast by Brook Hunt to account for 66% of the growth in zinc demand that is forecast over the next five years.

Century is a world class mine, with low costs relative to its competitors.

Our Century mine is the second largest zinc mine in the world, measured both on production and reserves. The cost advantage conferred by its scale places Century in the best 40% of the Brook Hunt C1 industry cash cost curve. Century has generated cash flow at the recent cyclical low of the price cycle, and we expect it will continue to generate positive cash flows. It is our intention to commence an exploration programme in the Century region that seeks to identify additional mineral resources that can utilise Century's existing infrastructure.

Our smelters are among the world's largest, generating significant economies of scale.

Our Hobart and Budel zinc smelters rank sixth and twelfth, respectively, based on global production. This enables these smelters to generate significant economies of scale, which, together with efficient operations, allows them to operate with low unit costs. Both sites are placed in the better 50% of the Brook Hunt industry total cash cost curve. In addition, our Century and Rosebery mines produce a majority of the feedstock for these smelters.

Our Port Pirie smelter is the largest primary lead smelter in the world. It is a complex, multi-metal facility incorporating lead and precious metal refining, zinc and copper-cathode production and silver and gold recovery. This diversity of revenue sources has enabled Port Pirie to generate solid cash flows throughout the recent period of low commodity prices.

We produce high quality, branded products that earn premium margins.

A large portion of our product portfolio consists of zinc alloys, including the EZDA, used for diecasting. These zinc alloys generate significant premiums over LME prices. Approximately half of Hobart's production consists of high quality alloys that are exported to China, Taiwan and Hong Kong. We primarily compete in markets that offer higher anticipated growth and the greatest price premium for our products.

We sell our Asian export commodity lead and zinc products at the smelter port under an agreement with the global trading company Trafigura B.V. This arrangement allows us to maximise the realised margin on these products while eliminating the need for additional working capital associated with this distribution system. It also allows us to focus our marketing efforts on our higher premium products.

We have an integrated set of mining and smelting assets with valuable linkages.

The total zinc unit production at our mining operations and the zinc unit capacity at our smelting operations are broadly equal. This balance gives our smelters a secure concentrate supply and provides a long-term market for our mines. In addition, our balanced mix of zinc mining and smelting assets provides our Company with a form of natural hedge against movements in treatment charge terms between mines and smelters, as both producers and consumers of concentrates. Furthermore, our Port Pirie smelter plays a unique role in our business, economically extracting zinc and other metals from Hobart's by-product residues.

Our financing is conservative, with low balance sheet gearing.

As at 29 February 2004, our borrowings were A$180.4 million, which are secured by the assets of the Zinifex group. This conservative financial gearing enables our Company to minimise borrowing costs, retain internally generated funds to meet our capital requirements and reduce financial risks during periods of weak metal prices.

We have a suite of attractive growth options that accentuate existing strengths.

We believe that we have attractive organic growth options that will support our competitive strengths and generate attractive investment returns. These options include low cost capacity expansions, opportunities to increase diecast alloy production, reserve extensions and operational productivity improvements focused mostly on increasing metal recoveries. We expect to fund these projects from cash generated by the Company's operations.

We seek excellence in safety, the environment and our relations with the community.

We strive to maintain a safe environment for our workers, minimise our impact on the environment and be welcomed by the communities in which we operate. We believe that these goals support our financial objectives and create access to future business opportunities. Our operations have improved in a number of these areas. We have identified and understand these risks, which are being actively managed. We recognise that community expectations will rise over time, and our performance must match this increase in expectations.

Business Strategy

Strategic Purpose

Our primary strategic purpose is to maximise total shareholder returns. Our focus will be to increase the return on capital that is already invested in the Company and to pursue disciplined growth through investment that delivers returns in excess of our cost of capital.

Business Boundaries

It is currently our intention to continue to focus our business activities on the zinc and lead industries. Our exploration strategy will target base metals, particularly zinc and lead.

We presently hold an integrated set of mining and smelting assets with similar production capacities in both the mining and smelting of zinc. Our strategy is to maintain an integrated position across these two asset classes, albeit with a gradually increasing focus on mining where we expect potential returns to be greater than in smelting.

We believe that most of our Company's prospective economic value lies in our Australian-based mining and smelting assets, which supply the Asia-Pacific region, including China. We intend to concentrate our resources on the high growth major industrial markets of the Asia-Pacific region in the future. Accordingly, we expect that from time to time we will assess our mix of assets and consider the appropriateness of continuing to maintain our non-Australian assets in the group.

We intend to pursue organic growth opportunities within our strategic business boundaries. At present, we do not expect to undertake major acquisitions. The only greenfield development we are now contemplating is the Dugald River deposit, if that resource can be economically developed.

Company Focus

The strategic objectives that we expect to pursue for the purpose of maximising total shareholder returns will be focused on the following aspects of our business.

- **Premium Margin Products:** Our product portfolio has a large proportion of products that realise significant premiums above the LME prices. In most cases, we choose to compete in markets that offer higher anticipated growth and the greatest price premium for our products. We intend to progressively shift our marketing and production to gain an even greater exposure to premium margin opportunities by expanding our diecasting alloy production capacity at Hobart and Budel.

- **Scale Efficiency:** We intend to pursue expansion opportunities initially at our Budel facility to allow us to generate further economies of scale and offer us further exposure to key markets which are either growing or where there is demand for our products.

- **Operations Productivity:** We will continue our ongoing programmes aimed at minimizing unit costs, focusing particularly in respect of energy and labour costs. We also intend to pursue process efficiency initiatives focused on increasing metal recoveries and reducing residue generation. We expect to minimise the working capital employed in our businesses and pursue a disciplined approach to capital investment and resource prioritisation.

- **Commodity Price Leverage:** Our current intention is to operate without any foreign exchange or commodity price hedging in place, to maximise the returns on our assets from a continued improvement in Australian dollar commodity prices.

- **Conservative Gearing:** We intend to maintain a conservative level of financial gearing which will enable us to minimise our borrowing costs, to fund attractive investment opportunities from internally generated cash flow and to help us generate cash flow during periods of weak metal prices.

- **Resource Renewal:** We are re-establishing an exploration and development capability. We will seek to extend the economic life of our existing mines and leverage our existing infrastructure through exploration in the vicinity of our present mine sites. During 2004, we may re-evaluate our future strategy with regard to the development of, acquisition of or exploration for new major resources.

Marketing and Sales

Strategy and Organisation

We have a single global marketing group led by a general manager and four marketing managers. Two of our marketing managers are based in Australia, one in The Netherlands and one in the United States. Our

marketing and sales efforts are managed and coordinated centrally through our Melbourne, Australia office. Complementing our marketing and sales team in Melbourne are our marketing and sales teams located in Budel, The Netherlands, and Clarksville, United States.

Our marketing and sales representatives work closely with our customers to understand their development plans and operational needs. We seek to build strong, long-term customer relationships and to differentiate ourselves from our competitors by focusing on delivering quality service and a range of premium products. The Company is actively engaged with various industry associations and end use application bodies to promote the growth of the products that we produce.

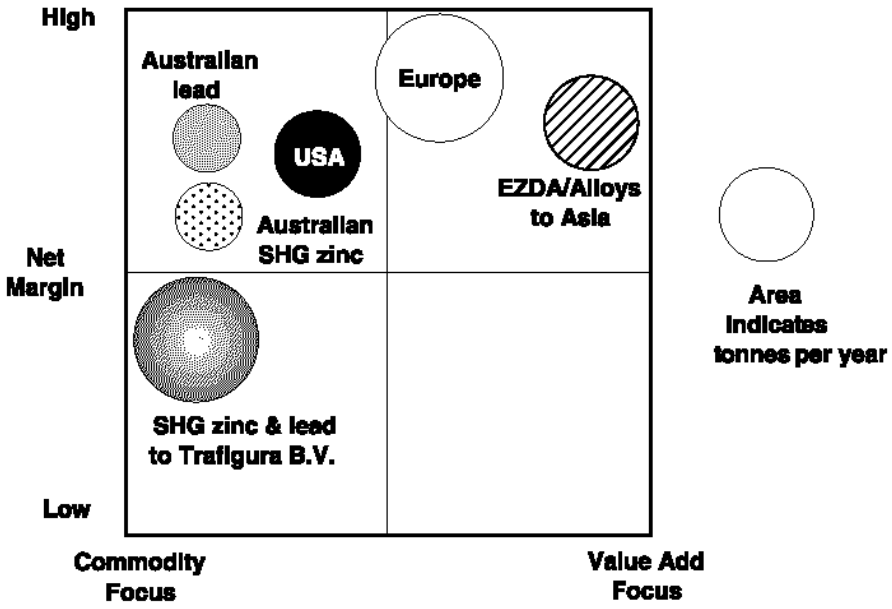
We sell a range of zinc metal, lead metal and associated alloys in 20 countries. We pursue different marketing strategies in the various product and regional markets we serve based on their potential to maximise profit margins, grow sales and reduce working capital employed.

Our product strategy is to increase the proportion of sales and production devoted to high margin, premium products, which are principally alloys such as EZDA. We will continue to market our commodity grade lead and zinc products directly to domestic customers, primarily as a result of the higher margins we receive due to relatively low realisation costs. Commodity export sales, principally into Asian markets, are made via our marketing arrangements with Trafigura B.V.

Our market strategy is to largely focus on the global industrial production centres of Europe, the United States and Asia, with a particular emphasis on the developing market of China. We are seeking to expand sales in the current deficit European market, with increased production at Budel generated through low cost expansion of the smelter.

The relative profitability and marketing focus of our products is illustrated in the diagram below.

Global Marketing Portfolio



Source: Company data

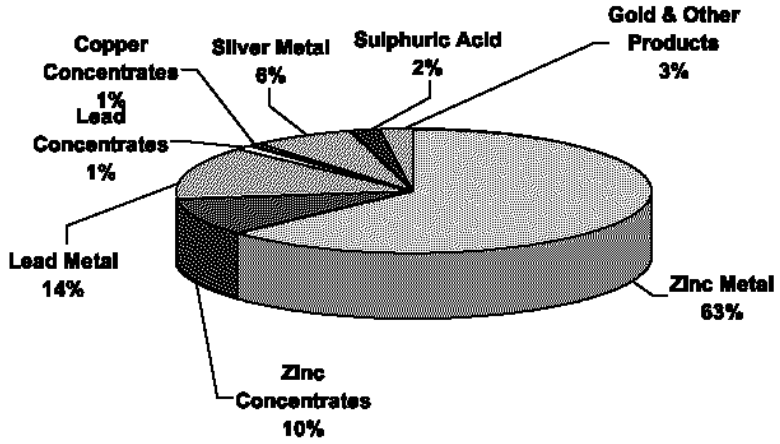
"Net Margin" in the diagram above is defined as "Price Premium above LME, less Realisation Costs", which are mainly variable costs of freight, other sales and logistics costs, and is calculated in US$ per tonne.

As our smelters utilise more of our produced concentrates, we will reduce our focus on external marketing and sales of concentrates.

Zinc Marketing and Sales

A breakdown of Zinifex's forecast revenues by product to be sold in 2005 is provided in the diagram below.

Zinifex Forecast 2005 Sales Revenue by Product
(A$1.66 billion)



Source: Company data

Asia Pacific

Our Melbourne-based marketing team focuses on our diecast alloy markets in the Asia-Pacific region, where our EZDA product is widely recognised as the market leader. We actively promote EZDA for use in various diecasting applications. We estimate that the current Chinese market for diecast alloys is approximately 340,000 tonnes per year, of which Zinifex supplies approximately one third.

In the Asia-Pacific region, we have strong relationships with distribution partners, who help facilitate the access of our alloy products to end-use customers. Lee Kee is an important distributor, whom we use for the distribution of a substantial portion of our zinc alloy product sales to China, Hong Kong and Taiwan. Additionally, we have a zinc alloying joint venture, Genesis, with Lee Kee located in the Ningbo region of China. Our Lee Kee arrangement has recently been expanded to improve the margins achieved for our current and future EZDA sales into China.

We have an important commercial relationship with the international trading house, Trafigura B.V., for the sale of our export commodity grades of zinc and lead produced from our Australian smelters.

Since 1 January 2004, Hobart's 100,000 tonne per year SHG zinc production has been sold FOB to Trafigura B.V. We expect that realised margins plus cost savings arising from the closure of our own Asian distribution system will increase our net margins relative to results achieved in recent years. Further, this change in the terms of our sales arrangement has substantially reduced working capital, thus boosting Hobart's return on capital employed.

Our primary source of competition in these markets is from Asian producers, who have certain cost and location advantages, particularly in relation to freight costs. Most of our competitors have large domestic markets relative to the smaller Australian domestic market. We believe that our new arrangements with Trafigura B.V. will largely address our relative geographical disadvantage for commodity products in export markets, because our metal products will be sold at the smelter's port. This arrangement eliminates the need to secure freight to Asia for commodity products during a period of increasing freight rates, or to carry large stocks of such commodity product.

We are in the process of changing our arrangements for transport of EZDA to our Asian customers, utilizing containerised logistics in place of bulk shipping, which is likely to reduce our annual freight costs by more than A$1 million.

Europe

Our team located in The Netherlands leads our marketing and sales activity in Europe.

Currently, our Budel smelter produces and distributes primarily SHG and continuous galvanizing grade zinc metal. Our continuous galvanizing grade ("CGG") zinc product achieves a premium relative to our SHG products in the European market. We focus our marketing on building relationships with producers in the sheet steel galvanizing sector and large integrated steel producers. Budel primarily supplies manufacturers located in The Netherlands, Belgium, Germany, France and Austria.

In this market, we have not yet developed substantial zinc diecast alloy capability. During the next few years, we intend to increase the amount of zinc diecast alloys produced at our Budel smelter and distributed in Europe.

Due to the location of our Budel smelter, we have a significant freight advantage, since most of our customers are located within 300 kilometres of our smelter. Our primary source of competition is from other Western European smelters. Over the last few years until recently, our competitors have been expanding production capacity, which had turned the European market from a deficit to a surplus. During that period, our competition intensified and our maintenance of market share was difficult. More recently, a number of permanent smelter closures in Europe have tightened the market again, placing it in deficit. We believe that our zinc products from Budel are differentiated based on quality, which has allowed us to grow our share of the CGG segments at the expense of some of our competitors.

United States

In the United States, we primarily distribute SHG and CGG zinc metal products. We sell most of the production from our Clarksville smelter through an agent. Our Clarksville smelter has a geographic advantage for the supply of products to steel companies and galvanisers located in the Midwest United States.

The North American market is a net importer, which attracts a broad range of competitors. Our main competition comes from Canadian producers, who produce a product of similar quality. Custom alloyers dominate the North American diecasting market.

Lead Marketing and Sales

Our Melbourne-based marketing group is responsible for the marketing and sales of lead metal products. We sell lead directly to the Australian domestic market with the balance for export sold to Trafigura. The BHAS (Diamond Brand) lead, which we produce at Port Pirie, is recognised in the Asia-Pacific region as a high quality product.

Since 1 January 2004, Port Pirie's 190,000 tonne per year export production has been sold FOB to Trafigura B.V. We expect that realised margins plus cost savings arising from the closure of our Asian distribution system

will increase our net margins relative to results achieved in recent years. Further, this change in the terms of our sales arrangement has released substantial amounts of working capital, thus boosting Port Pirie's return on capital employed.

Some of the lead produced at our Port Pirie smelter contains small amounts of bismuth, which has particular benefits in lead acid batteries. Accordingly, part of our lead marketing strategy has been to focus on promoting the benefits of bismuth in these products. Trafigura B.V. plans to continue to market higher bismuth lead on our behalf.

Similar to the zinc market, our competitors in the region are principally from North Asia. With the exception of the Australian domestic market, these competitors have geographic cost advantages in many Asian markets. As noted above, most of our competitors have large domestic markets compared to ours in Australia. We seek to overcome our relative geographic disadvantage for lead products in the Asian market through our agreement with Trafigura B.V. where metal is sold at the smelter's port, thereby removing the need to secure freight to Asia and carry large stocks of materials.

Sulphuric Acid Marketing and Sales

Our domestic marketing and sales arrangements are managed through Interacid Trading SA, a global trader. Interacid has a local office and, in conjunction with members of our global sales and marketing team, is responsible for the scheduled offtake of sulphuric acid from the Hobart and Port Pirie smelters. Most of the acid is sold to the local fertilizer industry.

The Australian acid market recently switched from a supply surplus position to a deficit following the loss of acid production arising from closure of the Cockle Creek smelter and the Port Kembla copper smelter in the latter part of 2003. Acid prices have risen in response to this change in supply dynamics, thus increasing acid margins at the Hobart and Port Pirie smelters.

Our Clarksville operation sells sulphuric acid produced by the smelter through a joint venture arrangement known as Zinifex-Taylor. Zinifex-Taylor arranges distribution of acid primarily to customers located within a 400-mile radius of the Clarksville smelter.

Budel's acid production is sold directly to major European consumers, who are located in close proximity to the smelter.

By-Product Metals Sales

Our Australian smelters produce a number of by-product metals, including copper, silver, gold and cadmium. Such metals include gold doré at our Port Pirie smelter and Rosebery mine, silver, copper cathode and bismuth alloy from our Port Pirie smelter, and pure refined cadmium from our Hobart smelter. We trade all of these metals through a combination of domestic and overseas customers and, in some cases, through traders. Our global sales and marketing team manages the sale of these products.

Century Concentrate Marketing and Sales

We have a small Melbourne-based team with significant technical, commercial and logistical experience that manages our global concentrate marketing, sales and procurement arrangements. Our Melbourne-based team cooperates closely with our operating sites and with third-party smelters to ensure that concentrate feed is continuously maintained to these third-party operations.

The majority of our concentrate produced at our Century mine is sold to our smelters. In particular, Budel takes almost 100% of its concentrate requirements from Century. Our Hobart and Clarksville smelters purchase approximately 26% and 16%, respectively, of their zinc concentrate requirements from our Century mine. Our

Port Pirie smelter purchases approximately half of the lead concentrate produced at Century. We intend over time to increase consumption of our Century zinc concentrates at Hobart and Clarksville as technical and commercial conditions allow.

We sell zinc and lead concentrates that are not purchased by our own smelters to external third parties under a combination of long-term contracts and spot contracts.

The sale of our Century zinc concentrate is enhanced by:

- our strong technical support team that has detailed knowledge of the characteristics of our concentrate and significant experience in introducing it to smelters around the world;
- the proximity of our Century mine to major Asian markets;
- the considerable volume of concentrate produced, which allows us flexibility in customer delivery and provides us with efficiencies in transportation; and
- our commercial team that has a strong track record of building long-lasting business relationships with buyers and traders around the world.

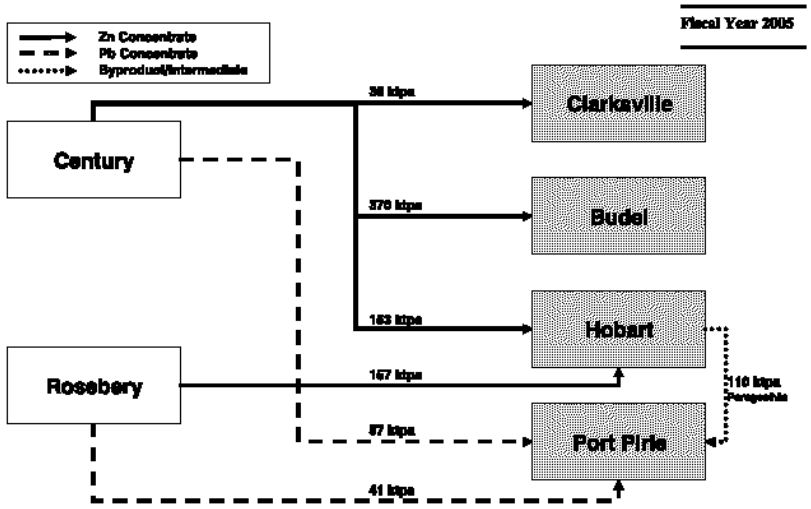
We currently have a full order book for all our Century concentrates and long-term sales agreements with a number of customers. The destination split of our planned sales volumes for fiscal year 2005 is shown in the table below.

Century Concentrate 2005 Forecast Sales

	Fiscal Year 2005 Volume (dry metric tonnes)
Customer	
Zinc	
Zinifex group	
Budel	370,000
Hobart	153,000
Clarksville	36,000
Third parties	
Umicore	50,000
MG Ruhstoffhandel	20,000
Glencore	45,000
Asturiana-Xstrata	30,000
Asturiana	29,000
Mitsui	96,000
Korea Zinc	70,000
Total Century zinc concentrates	899,000
Lead	
Zinifex group	
Port Pirie	57,000
Third parties	
Chinese	59,000
Total Century lead concentrates	116,000

Linkages Between the Assets

We are one of the world's largest integrated zinc and lead producers. As an integrated producer, our mines provide a stable and secure source of feed to our smelters. As illustrated in the diagram below, our smelters are also linked through the production and subsequent treatment of intermediate products and residues.



Mine-Smelter Linkages

Our Century and Rosebery mines provide a stable and secure source of feed to our Hobart, Clarksville, Port Pirie and Budel smelters.

Our Century mine supplies almost 100% of Budel smelter's feed requirements, and 16% of Clarksville's needs. Together, our Century and Rosebery mines currently supply approximately 50% of Hobart's concentrate requirements and around 30% of Port Pirie's concentrate requirements.

We plan to make modifications to our Hobart smelter so that our Rosebery and Century mines can supply 100% of its feed requirements. Production trials of 70% Century concentrate feed to Hobart have recently been completed successfully. We anticipate that Hobart will be processing 70% Century concentrate from fiscal year 2007. Providing dedicated sources of supply between each smelter and mine will enable simplified concentrate transport arrangements to be secured and assist smelters to optimise operations.

Successful test work has been completed at Clarksville on Century zinc concentrate feed rates equivalent to 35% of total roaster input.

Smelter-Smelter Linkages

Treatment of Intermediates

Our Hobart smelter was extensively modified during fiscal year 1998 as part of the co-treatment project. That project enabled Hobart to cease the production and ocean disposal of jarosite iron waste. An iron by-product, paragoethite, is produced instead, at a rate expected to be approximately 110,000 tonnes per year by fiscal year 2005. This by-product is shipped to Port Pirie for treatment. However, Hobart has retained two historical stockpiles of Hobart Leach Product 1 ("HLP1") and jarosite.

Port Pirie has a key strategic role for the treatment of our intermediates. By 2005, 26% of Port Pirie's feedstock will be from either residue by-products originating from Hobart or by-products from Port Pirie. At present, the secondary materials treatment rate at Port Pirie is approximately 90,000 tonnes per year through the sinter plant.

The forecast consumption of by-products for fiscal year 2005 is illustrated in the table below.

Tonnes per Year (Fiscal Year 2005 Forecast)	Produced by Hobart	Drawn ex Stockpiles	Sent to Stockpile	Processed by Port Pirie
Hobart Sourced				
- Paragoethite	110,000	—	32,000	78,000
- HLP1	—	27,000	—	27,000
Port Pirie Sourced				
- High zinc slag	—	5,000	—	5,000
Total	110,000	32,000	32,000	110,000

Hobart's planned increase in the proportion of Century concentrates will significantly reduce the production of paragoethite produced at Hobart. This will enable Port Pirie to reduce and ultimately eliminate paragoethite stockpiles, and focus on treatment of Hobart's historical stockpiles of HLP1, with the additional benefit of realising value from the contained metal within the HLP1. Subsequently, other by-products may be processed at Port Pirie.

Until the Hobart and Port Pirie zinc stockpiles containing by-products are exhausted, presently estimated to occur by 2020, the majority of Port Pirie's feed zinc units will be acquired at very low cost. Thus, we expect the economics of zinc production at this site to remain highly attractive during that period until 2020.

Fume Production

Port Pirie is currently producing 41,000 tonnes per year of zinc metal. This zinc is recovered by fuming zinc from the blast furnace slag, and then removing impurities. Zinc metal is then produced from this fume and cast into blocks, at a rate that is limited by the installed electrolytic tankhouse capacity.

Port Pirie is currently evaluating a project to use the full capacity of the zinc fuming plant, which is higher than Port Pirie's capacity to turn it into metal on site. This additional fume (zinc oxide) would be sold externally or shipped to our Budel or Hobart smelters and turned into incremental metal production at those facilities. It is expected that either smelter would add this fume directly to its roasters. In addition to further processing, this fume can be a useful cooling agent to help maximise roaster capacity. Port Pirie may also provide a valuable oxide feed stream to Clarksville.

Non-Physical Linkages

In addition to material flows, the Company also has non-physical linkages that add value to the entire group. These tangible links include knowledge sharing and shared services.

Our functional units, such as the centralised technology group, enhance the sharing of knowledge throughout the group. This technology group plays an important role in matching business strategy with technical opportunities. Allocation of technical resources is another key role, as is integration of technical activities and facilitation of capturing asset linkage benefits. The team actively promotes development of technical expertise, and the retention and management of intellectual property. The technology group provides a company-wide peer review resource, in particular assisting executive management with capital resource allocation and investment planning. The Company has adopted a shared service approach to its transactional and administrative processing focused activities. By bringing together functions that could be duplicated across assets, it is able to offer these services more efficiently and at a lower cost to the business as a whole. Our shared services include payroll,

accounts payable, purchasing, information technology and administration services. Equally, global functions are the norm in marketing, finance, and technology. These Company-wide organisational structures and approaches allow us to ensure consistent practices are applied throughout the enterprise, and that learning is quickly promulgated through our operations.

Mining Operations

Overview

Our most significant mining operation is the open-cut Century mine in Queensland, Australia that produces zinc and lead. Century mine is among the largest and most commercially attractive zinc mines in the world, given its well-defined, accessible ore body and low cost of production. Century mine is currently operating at full capacity and, based on our current expectations, we estimate that Century's remaining mine life will be approximately twelve years.

We also operate the Rosebery mine in Tasmania, Australia. Rosebery is a medium-sized underground mine that produces zinc, lead, silver, gold and copper. Rosebery's cash costs are relatively low after we credit by-product revenues. We estimate that Rosebery's remaining mine life will be at least six years based on two years of reserves and our current expectations regarding the future conversion of inferred resources to reserves.

Our recent historic results for our mines in fiscal year 2003 are provided in the table below for certain key indices of operational performance.

2003 Key Operational Performance Indices – Mines

	Units	Century	Rosebery
Ore Milled	tonnes (thousands)	5,170	810
Contained Metal Production			
Zinc	tonnes (thousands)	520	81
Lead	tonnes (thousands)	65	26
Metal Recovery			
Zinc	%	80.3	88.3
Lead	%	72.1	84.0
Cash Operating Costs[1]			
Excluding mine development	A$/t (metal)	373	550
Including mine development	A$/t (metal)	567	622

(1) Excludes by-product credits.

Century

Background

Our Century mine is located in Northwest Queensland in Australia, approximately 250 kilometres north by northwest of Mount Isa. Our mine's associated concentrate handling and ship loading facilities are located at Karumba in Queensland on the Gulf of Carpentaria.

Century is a large open cut zinc and lead mine, operating on a mining lease that we have secured for at least the life of the mine. The deposit was discovered in 1990 by CRA, now Rio Tinto, and was purchased by Pasminco Limited in 1997. Construction of the mine and processing facilities was completed at the end of 1999, and the operation was commissioned in early 2000.

Full production at rated capacity was reached in fiscal year 2003 during which time we produced 886,000 tonnes of zinc concentrate. During this period, lead concentrate production was 97,000 tonnes with average annual production increasing to 130,000 tonnes during the forecast period.

Asset Strategy

Century's performance is important to the whole Zinifex group because it represents a large proportion of our total production and economic value. Our primary strategic objectives for Century are improving operational productivity, enhancing our in-house open pit operational capability, which is currently run largely by a contractor, and exploring for regional resource extensions.

Maximizing zinc recovery from ore in the concentrator is a key operational goal to ensure maximum revenues for each tonne of ore extracted. Investment projects and operational improvement strategies aimed at increasing zinc recovery at the site are a major focus of our technical staff. Like other mining operations, we seek to manage our cash cost relating to waste stripping within the confines of our overall mine plan.

Currently, many aspects of Century's mining operations are outsourced to the Roche Eltin Joint Venture or "REJV" contractor. In the future, we will seek to exercise greater control over our operational planning and total costs, whether or not a contractor is engaged to run the operations. If necessary, we will further build our capability to operate world class open pit mines, either independently or with partners.

We are seeking to further exploit our knowledge of the Century region geology and to leverage our mill, pipeline and port infrastructure investment by undertaking regional exploration along the nearby Termite Range Fault, looking for satellite ore bodies similar to Century.

Reserves and Resources

Our Century mine has a significant reserve base. At the current rate of production, we expect the proved and probable reserves at Century to last until 2016. Century's ore reserves and resources as at 31 March 2003 are shown below.

Ore Reserves and Resource as at 31 March 2003

Reserves Category	Tonnes (millions)	Zinc (%)	Lead (%)	Silver (g/t)
Proved	52.7	12.2	1.5	33
Probable	16.1	10.8	1.2	28
Total[1]	68.8	11.8	1.5	32
Resources Category[2]				
Measured	60.1	13.5	1.8	45
Indicated	18.3	12.0	1.4	38
Inferred	0.2	4.0	0.6	8
Total	78.6	13.2	1.7	43

(1) When Century recalculates its reserves as at 31 March 2004 according to the usual annual cycle, present mining reconciliations suggest that the call factor for zinc grade may be understated by approximately 3%. Accordingly, there is a risk that Century's Life of Mine Plan may then indicate that ore mining at a slightly higher rate is required to maintain zinc in concentrate production, and could consequently shorten the mine's estimated life by approximately 5 months.

(2) Includes reserves.

The Century deposit is physically bound by east-west normal faults. We therefore do not expect the Century ore body resources associated with the existing open pit mine plan to increase as a result of exploration in immediately adjacent ground. However, the prospect remains for us to identify displaced blocks of ore, which may subsequently become additions to the Century resource, through planned on-lease exploration of selected targets.

Our Century mine is located in a highly mineralised province. Additionally, our existing infrastructure at Century and our handling and ship loading facilities at Karumba can be used to service future regional discoveries. We plan to explore the Termite Range fault corridor for additional zinc and lead deposits to increase our resources in the Century region.

Operations

Mining

We use conventional open pit mining methods at our Century mine. Our Century mine's ore body is flat lying and covers an area 1.4 kilometres by 1.2 kilometres with a final depth of 344 metres. Our Century mine's ore body consists of two mineralised layers, with an upper zone 8 metres to 10 metres thick, containing high lead and low zinc, and a lower zone 12 metres to 14 metres thick, containing higher zinc and lower lead. The geology of the ore body is relatively simple and consistent on a macro scale. However, localised faulting and folding have led us to develop a detailed short-term model for grade control purposes. Production drill holes are geophysically logged and faces mapped to assist in grade control.

We use conventional drill and blast mining techniques. The majority of our waste is removed by two rope shovels on 16 metre benches and hauled to the waste dumps, including in-pit dumps, using 230 tonne haul trucks. We also mine the limestone cap rock primarily with rope shovels, but we use 8 metre benches to reduce damage from large limestone boulders contained within the weathered matrix.

The Century mine plan is comprised of a series of sequenced stages of the open pit design, with progressive waste cutbacks that expose the next stage of the ore body for extraction. Presently, the mine is nearing completion of Stage 3 and is planning to make the transition to Stage 4 during July and August 2004. Insufficient pre-stripping progress could lead to exhaustion of ore in Stage 3 prior to exposure of ore in Stage 4, leading to a disruption in ore supply to the mill. Our current mine plan projects that access to Stage 4 ore should be achieved one month prior to exhaustion of Stage 3 and stockpiled ore. Contingency actions comprising temporary hire of six 90 tonne trucks and an additional excavator, have been implemented to minimise the risk of loss of this transition safety margin. However, there remain a number of operational uncertainties that could reduce this planned safety margin. Thus, the transition from Stage 3 to Stage 4 ore mining will require Century to meet a very tight waste removal schedule and we will face a greater degree of operational and financial risk if a disruption to that planned schedule occurs.

Planned increases in the waste stripping rate and the necessary trucking and shovel capacity to accomplish these increases are provided by the additions to the mining fleet that occurred in 2003 and are scheduled for early 2004. This investment in infrastructure and execution of the mine plan ensure the continuity of ore supply.

We blast ore and associated waste on 16-metre benches. We selectively mine these benches in a series of six flitches. To minimise dilution and ore loss, we also use Global Positioning System ("GPS") digging control, ore body dig tapes and manual ore spotting depending on the geological complexity of the area being mined.

Prior to crushing, we build upper zone and lower zone run of mine stockpiles to minimise grade variation. These stockpiles allow the mill feed grade to be adjusted according to the blend of material from the stockpiles.

Most of our mining operations are performed by a mining contractor, REJV, which is a joint venture between Roche Mining (owned by Downer EDI Group) and Henry Walker Eltin. We renegotiate a schedule of contract rates each year based on our historical physical production and open book cost performance, with any difference between estimated and actual costs for the year split equally between REJV and us under a profit share arrangement.

Our REJV mining contract expires in August 2004. We may choose to seek to renegotiate a further contract with the REJV, re-tender the mining contract or change to owner operation. We plan to make this decision in April 2004. We anticipate achieving some cost savings beginning in September 2004 either from a new contract or by becoming an owner-operator. A portion of these potential savings has been included in our forecasts for fiscal year 2005.

In fiscal year 2004, we plan to move a total of 29.5 million Bulk Cubic Metres ("BCM"), and process 5.3 million tonnes of ore grading 11.8% zinc and 2.3% lead. Our recently updated "Life of Mine" plan identified the need for additional trucking resources commencing in fiscal year 2004. In March 2004, we will own a haulage fleet of 16 Komatsu 830s for waste haulage and 10 Komatsu 630s for ore haulage. We purchased two of these Komatsu 830E haul trucks in August and September 2003 at a total cost of A$4.6 million and two of these Komatsu 630E haul trucks were purchased in December 2003. We are purchasing this equipment from the lessor. In addition, beginning in March 2004, we will own two Bucyrus rope shovels used for waste removal and a hydraulic excavator. REJV operates this equipment on our behalf.

We require five more new Komatsu 830E trucks and a 9 million BCM loader to meet the planned waste stripping capacity. These planned fleet additions will be leased under operating leases. They will be progressively commissioned from June 2004, which will enable waste stripping to increase in accordance with the "Life of Mine" plan.

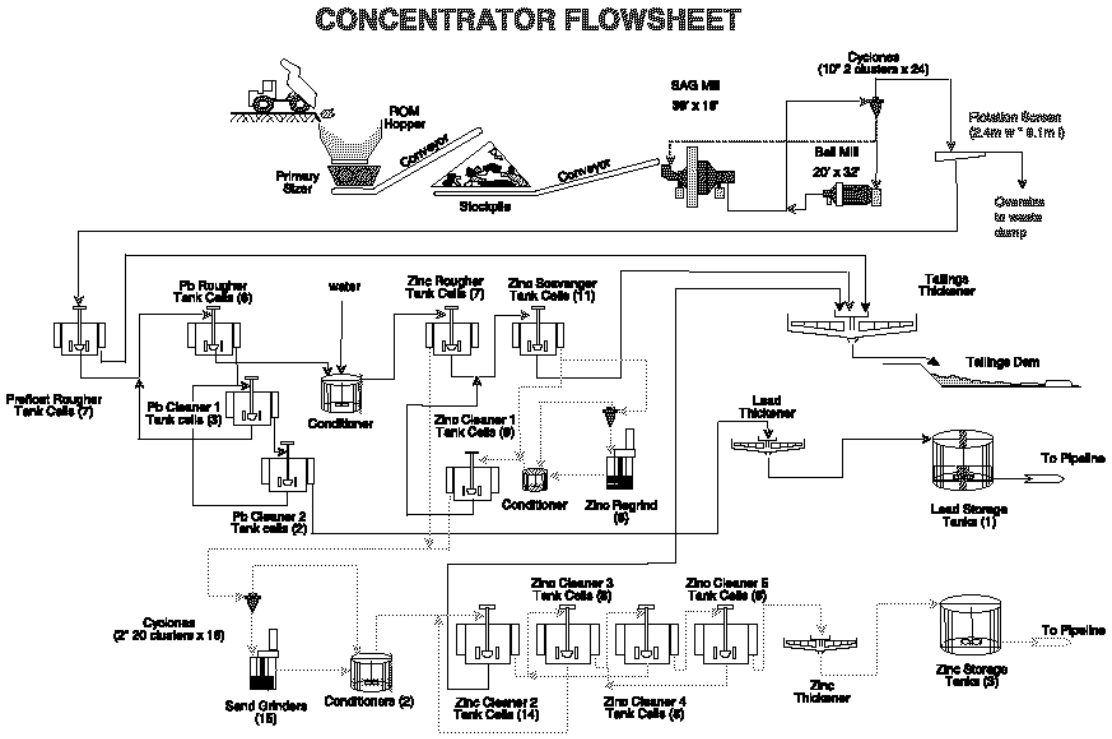
We anticipate our shovels to be life of mine equipment, due to reduced stripping requirements towards the final phases of the mine.

Processing

Our Century mine processing plant is largely a conventional grinding and froth flotation circuit. Due to the particularly fine grained nature of the zinc sulphide in the ore and its association with silicates, our Century ore requires ultra fine grinding in order to maximise recovery of zinc sulphides and achieve acceptable silica in concentrate for sale. We use a relatively large ultra fine grinding circuit to address this issue.

The following diagram shows the process for treating our Century mine ore.

Metallurgical Process Flow



We use two apron feeders to reclaim ore from the fine ore stockpile and feed the sizer. We then feed this ore from a stockpile to a 36 foot semi-autogenous grinding ("SAG") mill by conveyor. We then further grind our ore in a 20 by 32 foot ball mill, which then passes to the flotation circuit.

This flotation circuit consists of:

- a carbon pre float, which removes approximately 15% of the carbon from the ore;
- a lead flotation circuit, using two stages of cleaning;
- a primary zinc flotation circuit, which includes six 355 kilowatt regrind sand mills;
- an ultra fine milling circuit, which contains fifteen 355 kilowatt ultra fine sand mills operating in an open circuit to reduce particle size so that 80% of the material is less than 6.5μm; and
- a zinc ultra fine flotation circuit, which reduces the silica content and upgrades the zinc concentrate after ultra fine grinding.

Zinc metal production from the flotation circuit involves balancing volume of concentrate production, recovery to concentrate and concentrate silica levels to achieve the desired outcome. Currently, higher silica levels in concentrates (4.5%) are being produced, yielding improvements in recovery rates of about 2%.

We then thicken the lead and zinc concentrates to approximately 33% and 40% solids by weight, respectively, before we pump them separately to Karumba.

We store tailings from the process in a tailings dam designed to store 83 million tonnes over the life of the mine. Water from the tailings dam is collected in a 29 square kilometre evaporation dam. Due to its large size, this dam is a high water catchment area when it rains. Our tailings storage facility has been designed to operate on a zero discharge basis, although a discharge outlet is installed in the evaporation dam.

We will be required to arrange additional lifts of the tailings dam wall during the life of the project, the first of which we expect to occur in fiscal year 2006 at a cost of A$7 million

Coogee Chemicals owns and operates the reagent plant that is located on the site. Supply contracts for reagents and other chemicals are mostly competitively tendered or strategically sourced to ensure competitive pricing. However, chemicals specifically blended for use at Century or sold under sole distribution rights are negotiated with one supplier.

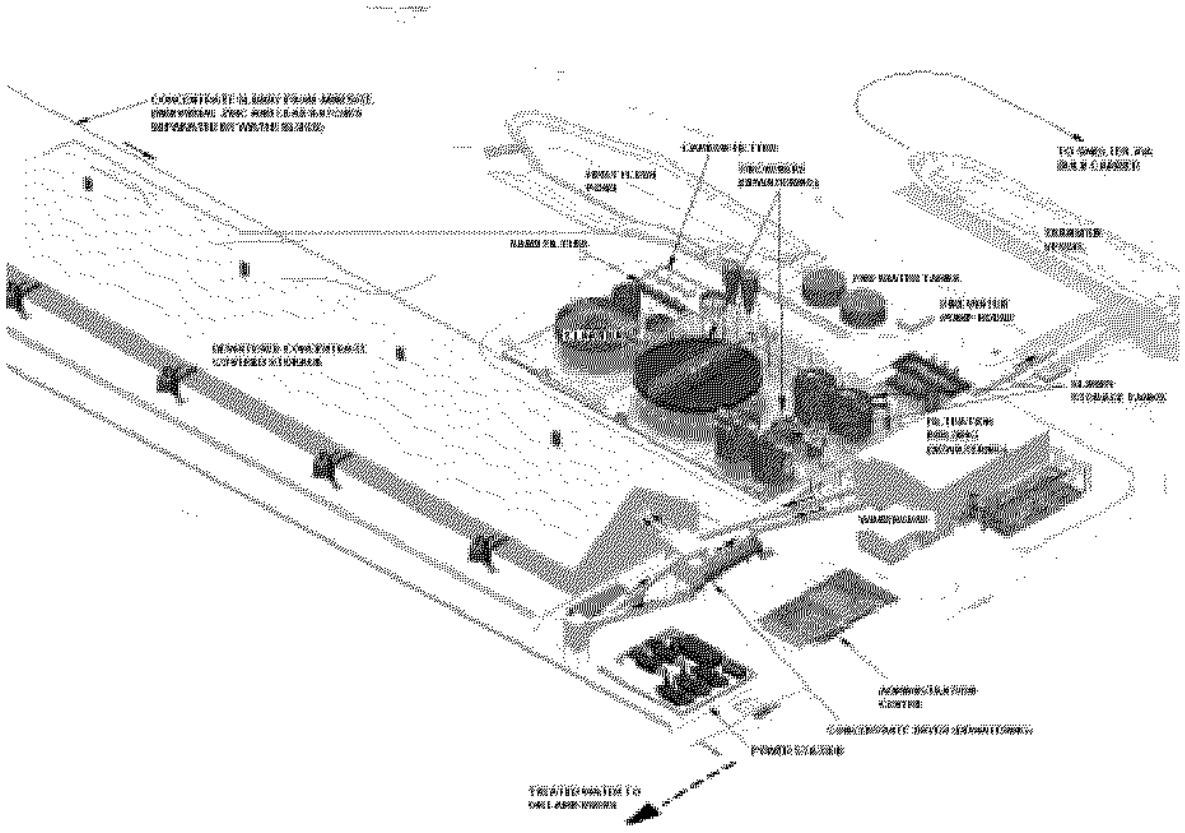
Concentrate Management and Logistics

Our zinc and lead concentrates are pumped in batches in a 304 kilometre single underground pipeline to Karumba. The pipeline crosses generally flat terrain and passes under five main river systems. We have a single pumping station at our Century mine. We have had no significant issues with the operation of our pipeline since it commenced operating in early 2000. We continually monitor and test our pipeline for wear and leaks.

We monitor operating pressure of the pipeline. In 2002, a pressure increase was observed and this was resolved by using anti-scalant and foam pigs to clean the line of scale. This practice will continue when a pressure increase is detected. Our pipeline is generally easy to access except for occasions during the wet season, which lasts from November until April.

We dry and store our concentrate at our port facility located on the Norman River in Karumba. An overview of our Karumba port facility is shown below.

Karumba Plant Overview



Our port facilities include:

- lead and zinc thickeners, which thicken concentrate to 48% to 55% solids;
- lead and zinc filtration using vertical plate filter presses;
- zinc drying using an inclined rotary dryer;
- a 48,000 tonne zinc concentrate storage facility;
- a 20,000 tonne lead concentrate storage facility;
- an automatic reclaim facility that discharges to a transport vessel; and
- a transfer vessel, the MV Wunma, which is a purpose-built self unloading vessel that can transfer up to 5,000 wet metric tonnes of lead or zinc concentrate to export vessels moored in deep water 24 nautical miles off the coast.

We have taken considerable measures to ensure that contamination of the Norman River and the Gulf of Carpentaria does not occur. Water from the concentrate slurry is treated prior to discharge. The Karumba facility

has the option to discharge water to pastoral land leased by the Morr Morr Pastoral Company, or to the Norman River. We have agreed on an environmental management plan with the Queensland Environmental Protection Agency ("Queensland EPA") to upgrade the waste water treatment plant for biochemical oxygen demand and nitrogen removal at a cost of approximately A$3.8 million before November 2004 to ensure that waste water discharges to the Norman River are within our licence conditions. The Queensland EPA has given approval for continued discharge of waste water to the Norman River until the EMP is completed.

We are conducting further investigations into water management issues to reduce the quantity of salts sent with process water down the pipeline to Karumba, so that we remain in compliance with the terms of the agreement between Century and Morr Morr Pastoral Company.

MV Wunma is operated and maintained by the shipping management company Intercontinental Ship Management ("ISM"). The MV Wunma is scheduled for its first major five-year dry docking in August 2004. We and ISM are jointly managing the strategy for obtaining a replacement vessel while the vessel is out of service for approximately six weeks. The expected cost of this replacement vessel is included in our financial forecasts.

Because Karumba port is in a cyclone-prone area, we have taken the customary steps employed by maritime operations in this region to ensure that tidal surges and cyclonic winds do not adversely impact the operations of our port or the MV Wunma transfer vessel.

Services and Infrastructure

Our Century mine is well supported by modern and efficient infrastructure and services. While roads to the mine can be rendered impassable during periods of flooding, our mine is able to operate all year round because an all weather airstrip allows jet aircraft to reach the mine. Our workforce commutes to and from Townsville and other regional towns by aeroplane at the beginning and end of their rosters. We rely on aeroplane charter companies to provide aircraft for these services. Our workforce resides in a high quality Company-provided accommodation village while at the mine.

Power is supplied to Century mine via a 220 kilovolt single overhead line from Mount Isa. The power station at Mount Isa toll generates electricity for Century mine from gas supplied under contract to Century for this purpose. The powerline is exposed to natural events like lightning and bushfires that can cause occasional interruptions to the power supply. Emergency on site back-up generators supply power for essential services if the supply of power from Mount Isa is interrupted.

Century mine receives water from underground aquifers near the mine. Although bushfires are a threat to the mine, we have taken steps aimed at protecting our property against such a threat.

Marketing

We primarily sell our concentrate from Century mine to other operations within the Zinifex group. In particular, our Budel smelter has contracted to take the majority of its concentrate requirements from Century mine for the life of the mine, and we estimate that our Hobart smelter will source 70% of its feedstock from Century beyond 2006. We sell the balance to third parties or on the spot market. See "Sales and Marketing" for a further discussion of the marketing of concentrates from our Century mine.

The sale of our Century zinc concentrate is enhanced by:

- our strong technical support team, with considerable experience in handling the concentrate;
- the proximity of Century mine to major Asian markets; and
- the significant volume of zinc concentrate produced, which gives us flexibility in customer delivery and greater efficiencies in transportation.

Our Century mine currently has a full order book for all its concentrates and long-term sales agreements with a number of customers.

We ship concentrates to our customers in Australia, Asia and Europe. We have in place a shipping contract to Europe, however we purchase freight for other destinations on a spot basis. Currently, 53% of our concentrates are shipped to Europe, 22% to Asia, 21% to Australia and 4% to the United States.

All our external sales to customers are shipped "CIF" (i.e., cost, insurance and freight) or "DES" (i.e., delivered ex ship, whereby we pay for insurance and freight). This allows us to control all our shipping, which facilitates smooth operations at ports and warehouses, and avoids any adverse impact caused by late arrivals of ships organised by customers. Because the pricing terms in our concentrate sales contracts are typically negotiated annually, we bear the risk of any increases in spot freight rates during the contract year, but we benefit when spot freight rates decrease.

Due to the recent tight supply of shipping in the Asia-Pacific region we are bearing the costs of substantially increased spot freight rates for the class of vessel that typically transports our Century concentrates. These increased costs have been incorporated into our forecasts.

Management and Employees

We have an experienced management team at Century. As of November 2003, we had 173 direct employees and 490 contractors, comprising 290 permanent contractors and 200 REJV contractors, working at our Century mine site. Importantly, we make no distinction between direct employees and contractors on site with respect to compliance with company policies and procedures, particularly in relation to safety and personal conduct. All our employees fly in and fly out of the mine. Rosters vary depending on the task the employee undertakes while at the mine. Our port operations employees are residentially based in company housing in Karumba.

The turnover rate among our employees was 21% for fiscal year 2003. This turnover rate is standard for an operation utilising a fly in - fly out roster. The turnover rate for REJV employees was 50% for the same period. We expect this will decrease with the commencement of a revised roster in March 2004. These turnover rates have not affected productivity at our Century mine.

Our workforce at Century, including all the employees of our contractors, work under Staff Contracts, Australian Workplace Agreements (which are employment contracts between individuals and Zinifex), or Certified Agreements (between our contractors and their employees). We have had no industrial disputes at Century mine. We have a successful pre-employment and traineeship programme for our local Gulf-based employees.

Our Century mine has historically had an excellent safety record with a 12 month rolling average Lost Time Injury Frequency Rate ("LTIFR") of 1.0 (per million manhours) and a Medical Referral Injury Frequency Rate ("MRIFR") of 21.0 (per million manhours) for fiscal year 2003. We believe that our systematic approach to safety introduced during mine construction and the strong safety culture of our workforce result in these low injury rates. Century mine received the Australian Minerals Council "Minex" Safety Award in 2002.

Tragically, there was a fatality at Century on 10 February 2004. The incident occurred in the heavy equipment workshop while workers were removing a wheel from a haul truck. Management, local police and the Queensland Department of Natural Resources, Mines and Energy are conducting investigations into the incident.

Community Relations

Maintaining valued external relationships with a diverse group of local, regional and state stakeholders, including the Aboriginal communities of the Gulf region, is critical to the long-term operation of Century.

The Gulf Communities Agreement ("GCA") for our Century mine was negotiated under the Right to Negotiate provisions of the Native Title Act, 1993, between, Pasminco Century Mine Limited (now Zinifex Century Limited ("ZCL")), the Queensland Government and four Native Title groups, on whose land our Century mine, pipeline and port facility are situated. The four Native Title groups are the:

- Waanyi;
- Mingginda;
- Gkuthaarn; and
- Kukatj.

The GCA was signed in February 1997 and came into effect in September 1997. Under the GCA, both the Queensland State Government and the Company fund benefits to be provided to these Native Title groups. We estimate that the benefits the Company will fund will total approximately A$65 million over the life of the mine.

Our commitment to fulfilling the intent and specifics of the GCA partnership is demonstrated through our promotion of a strong site culture of racial tolerance and cross cultural learning. To that end, our overall strategy encompasses such aspects as:

- allocating resources to ensure implementation of the GCA requirements;
- creating programmes that deliver significant local employment levels (currently greater than 20%);
- implementing local training programme focusing on transferable skills;
- promoting development of local indigenous Century mine site businesses and offering assistance to regional business development; and
- establishing a formal consultative mechanism.

A sit-in protest occurred at our Century mine site at the end of 2002, arising from local communities' frustration with the pace of delivery of the anticipated GCA benefits. We responded by refocusing various programmes and promoting the establishment of broader links with the community. We have added additional resources to the GCA Department over the past twelve months, including the hiring of an experienced full time manager in December 2003.

The initial five-year review of the GCA commenced during 2002. Following the expression of community concerns regarding the progress of benefit delivery at that time, the parties agreed to a subsequent external review. That process has recently been completed by an independent consultant engaged by representatives of the community. Their report and conclusions have been shared with Century management, who will discuss these with other parties to the GCA, and consider any modifications that may be mutually beneficial.

Environmental Management

General

Environmental considerations were an integral part of the design and construction of our Century mine infrastructure and processes. Accordingly, our strategy is to mitigate or remove the potential for a number of environmental issues through, for example, our integrated system of water management structures (primary bunds, first flush ponds and sediment dams), water treatment and re-use at the port site, the design of the MV Wunma and design and monitoring of our concentrate pipeline to Karumba.

Our Corporate Environment Policy and ISO 14001 Environmental Management System Standards form the overall framework for environmental management at Century mine. The ISO 14001 Standards include incident reporting requirements, management review, employee education and training, monitoring, record keeping and document control.

At Century we seek to manage potential environmental issues through our day-to-day work processes, proper design and construction of our infrastructure and longer term monitoring, planning and research activities.

Material Environmental Issues.

During 2003, the Company engaged an independent environmental consultant, URS, to work with our operations personnel to identify material environmental issues faced by the Company and to estimate the current and likely future costs associated with rectification and remediation of those issues. The process for estimating future costs relating to identified material environmental issues employed probabilistic techniques, the methodology of which is set out in more detail in the URS letter in Annex D to this Institutional Offering Memorandum.

The process generated a range of likely cost estimates associated with the material issues that were identified, based on an assessment of the likelihood and timing of each occurring. The cost of each estimate (expressed in unescalated present day dollars) was discounted back to the present day at an 8% real discount rate and the total was then expressed as a single amount at a range of confidence levels. The guidelines used to determine whether an environmental issue was material or not, and the limitations and qualifications to the process for identifying material environmental issues and estimating future costs, are summarised in the URS letter in Annex D to this Institutional Offering Memorandum and must be read in conjunction with the summary of material environmental issues in this Institutional Offering Memorandum.

The Company has made a provision in its Statement of Financial Position for each of the material issues identified by our environmental review, which it is required to under law and in a manner consistent with Australian GAAP. A reconciliation of these provisions to the estimated environmental costs at each site, expressed to an 80% confidence level, is shown in Note 12 to the Statement of Financial Position. While estimates expressed to an 80% confidence level reflect present day amounts, which in probability would be expected to be exceeded only 20% of the time, this confidence level has been adopted by the Company as one that it considers is prudent for planning purposes. However, as our estimation process was based on probabilistic techniques, there is a chance that the actual costs of rectifying material environmental issues will exceed those estimates and, potentially, it may substantially exceed them. There is also a chance that not all the events underpinning our evaluation may necessarily occur and, of those that do, the actual costs and timing of them could differ from our estimates.

We have included certain environmental operating and capital costs in our fiscal year 2004 and 2005 forecasts. These are the costs that our environmental review determined (at an 80% confidence level) we are likely to incur during those periods relating to the material environmental issues identified, as quantified by our review and set out in this Institutional Offering Memorandum.

A summary of the material issues identified by our study for Century mine, is shown below together with relevant key assumptions associated with the calculation of the relevant estimated rectification and remediation costs. You should read this summary in conjunction with each of the sections of this Institutional Offering Memorandum referred to above.

Waste Rock Dumps Rehabilitation. There are presently three waste rock dumps (north, south and west) on site at Century. Rehabilitation of the waste rock dumps will be required, and includes completion of the limestone cover plus topsoil and seeding. Rehabilitation activities are assumed to commence any time between fiscal year 2013 and fiscal year 2020. We have assumed a 100% likelihood of these actions being required.

Mine Closure and Site Rehabilitation. A detailed closure plan will be required for the site. This would need to include closure of the tailings storage facility, removal of infrastructure, remediation of site contamination and potentially decommissioning of the evaporation dam and removal of the dam wall. It is assumed that the tailings landform will require cover and revegetation as the nature of operations does not allow progressive rehabilitation during mine life. It has also been assumed that it is unlikely (i.e., only 5% probability) that the evaporation dam will require decommissioning at site closure. While its decommissioning and removal of the water at closure is a requirement of the site's current environmental authority, it has been assumed that the dam will not require decommissioning and will be viewed as a community asset at mine closure. Our cost estimates have assumed that all roads and the airstrip will remain in operation and do not require rehabilitation. Port site liabilities are likely to exist for monitoring the effectiveness of closure initiatives, maintenance, rehabilitation and ongoing treatment of water discharges. For the purposes of our assessment, the majority of closure activities are assumed to commence in fiscal year 2018 and continue for two years to fiscal year 2020. Closure costs are progressively provided for through the lodgement of a staged environmental bond with the Queensland Department of Minerals and Energy. As at 31 December, 2003, A$10.4 million had been lodged in the form of a bank guarantee.

Salting of Page Creek. Extensive salting has previously occurred along a section of Page Creek, although this has substantially reduced in the past 18 months. Studies are planned in the near future to properly identify the issue. Controlling seepage, through interception and recovery to mitigate future salting may be required. We have assumed a 50% likelihood that control of seepage will be required. Any required mitigation activities are assumed to arise between fiscal year 2006 and fiscal year 2014.

Port Facility Water Treatment Plant Effluent. Effluent from the treatment plant (ETP) at the Karumba port site is either discharged to the Norman River or used to irrigate a cattle grazing property operated by the third-party owned Morr Morr Pastoral Company approximately three kilometres east of the port site. On occasions, the electrical conductivity limits do not allow discharge of the effluent to Morr Morr and the effluent does not meet Queensland EPA licence limits for discharge to the river for organic loading. An Environment Management Plan has been negotiated with the Queensland EPA that allows us to discharge water that does not meet the Queensland EPA licence limits to the Norman River until November 2004. Upgrading the effluent treatment plant will address the Queensland EPA licence limits, but additional work will be required to reduce electrical conductivity levels. Licence upgrade activities for the effluent treatment plant will commence in fiscal year 2004, with completion expected in fiscal year 2005. Options for addressing waste water conductivity include plant or operational changes, installation of an evaporation facility at the mine site, or installation of a treatment facility. We have assumed a 50% likelihood that additional work will be required to address these electrical conductivity exceedances and assumed that this work will occur in fiscal years 2006 and 2007.

Other Issues. Our review also assessed the risk and potential impact of the following issues at Century as being material, but concluded that at the 80% confidence level utilised for planning purposes, the NPV discounted forecast financial impact was less than A$1 million. These risks were related to Tailing and Evaporation Dam Seepage, Waste Rock Dumps Acid Generation, Wastewater Discharge to Norman River and Sinking of the MV Wunma. Any change to the assumptions used to evaluate these particular risks, such as confidence level, estimated cost, timing or likelihood of occurrence could however increase this estimated financial impact.

Production Data and Forecasts

Our Century mine is the world's second largest producer of zinc concentrate, producing approximately 5% of total world production. Our Century zinc concentrate has a number of desirable characteristics, including:

- a high zinc grade, resulting in zinc smelter recovery rates in excess of 95%; and
- a low iron content reducing the volume of iron residue production at smelters and thus residue disposal costs.

Our Century zinc concentrate also has a high silica and carbon content, which requires specific procedures for storage and transport, as well as smelting. Initial self heating characteristics have been minimised through changes in handling, shipping and customer storage procedures. These attributes have not constrained external sales or attracted material commercial penalties.

Our Century mine reached full production in fiscal year 2003. The table below sets out our production data at the Century mine for each of fiscal years 2001, 2002 and 2003 and our production forecasts for fiscal years 2004 and 2005.

Production Data for Century mine

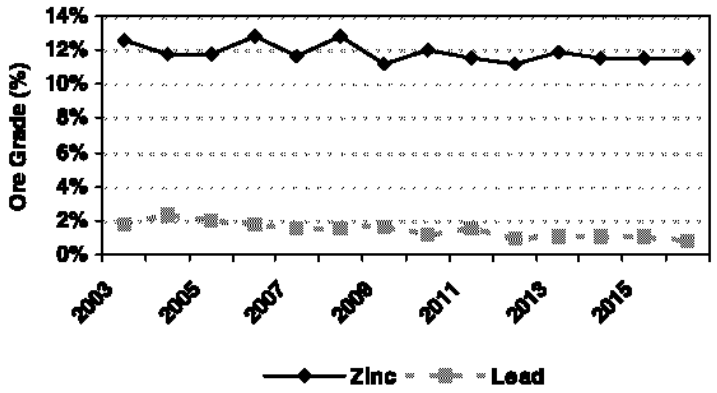
		Historical			Forecast	
		Fiscal Year Ended or Ending 30 June				
		2001	2002	2003	2004	2005
Strip ratio	tonne:tonne	16.5:1	14.8:1	13.3:1	11.3:1	11.8:1
Total BCMs mined	Millions bcm	32.4	30.9	27.0	29.5	33.0
Ore tonnes processed	Million tpa	4.78	4.86	5.17	5.38	5.34
Zinc grade of ore	%	11.7	12.7	12.6	11.8	11.9
Zinc recovery	%	74.5	77.7	80.3	79.6	81.7
Zinc concentrate produced	thousand tpa	721	811	886	863	885
Zinc concentrate grade	%	57.8	58.0	58.7	58.4	58.0
Contained Zinc	thousand tpa	417	470	520	503	514
Lead grade of ore	%	2.4	2.3	1.7	2.4	2.2
Lead concentrate produced	thousand tpa	84	134	97	136	125
Lead concentrate grade	%	64.2	65.7	67.0	67.0	64.3
Contained Lead	thousand tpa	54	88	65	91	80
Silver in lead concentrate	g/t	287	312	221	387	336

We are currently operating the concentrator to a higher target silica level in zinc concentrates. This project requires no additional capital and may allow zinc recoveries of up to 2% greater than present results, to be sustained in the future. Silica targets will be determined in conjunction with our customer needs, as well as our requirements at our Budel smelter. Our customers have been advised of the increased silica levels, which are running at approximately 4.5%. To date, there has been no adverse reaction to those silica levels.

In the longer term, we expect the zinc grade of our ore to decrease slightly and the lead grade of our ore to decline, as shown in the diagram below.

Century Ore Forecast Zinc and Lead Grades

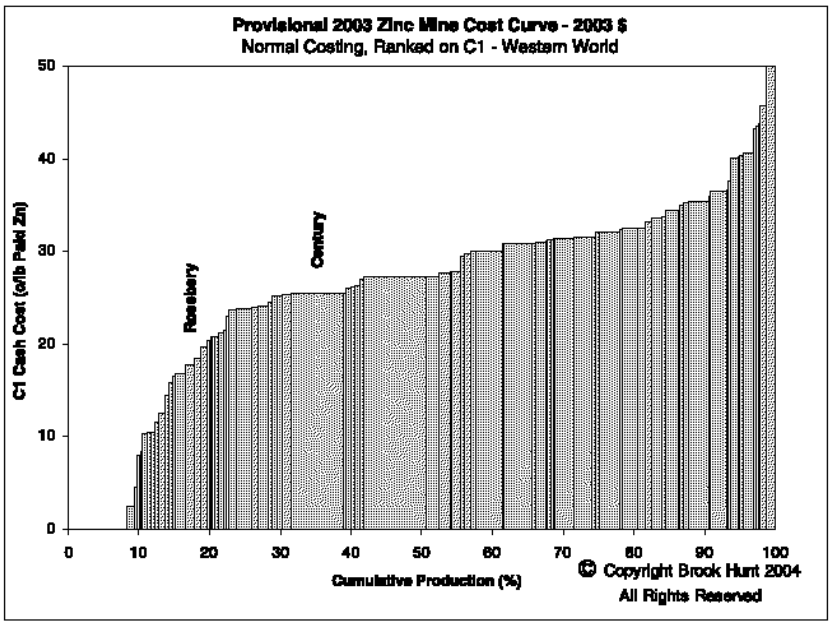
The graph below shows our forecast zinc and lead grades for our Century ore from 2003 to 2016.



Operating Costs Data and Forecasts

The benefits of scale that we enjoy at Century mine are partially offset by our currently high waste stripping ratio, which we do not anticipate reducing significantly until 2010. Our Century mine is in the best 40% on the Western World's zinc mine C1 industry cash cost curve published by Brook Hunt. It should be noted that this cost curve is produced by giving cash credit to mines for the revenue generated from non-zinc co-products including in the case of Century, lead and silver. Century's position on the Brook Hunt 2003 Normal C1 Cost Curve is shown below.

Brook Hunt 2003 Normal C1 Cost Curve (in US cents)

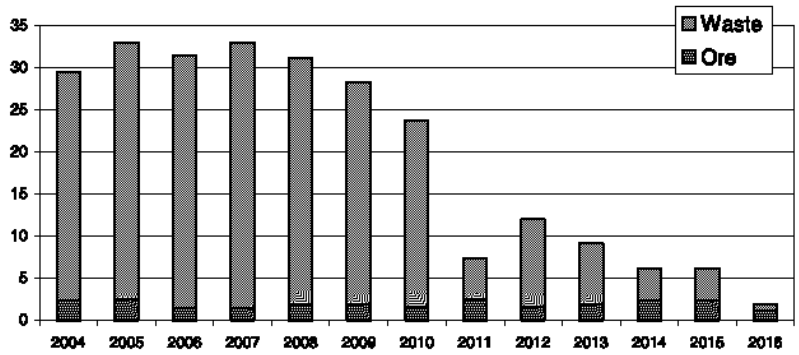


Brook Hunt's 2003 Normal C1 Cost Curves are modelled using base US dollar data from 2002 and estimates of 2003 exchange rates, inflation, metal prices and realisation charges. The full effect of exchange rate and inflation fluctuations in each country has been applied. Our operations have been plotted using forecast calendar year 2003 data supplied by us to Brook Hunt.

C1 Cost (direct cash cost) is the unit cost to concentrate (i.e., the cost of mining (other than cash waste stripping costs that have been deferred, to be recognised in future periods), concentrating and on-site general and administrative costs), plus the unit realisation costs (concentrate freight costs and treatment and refining charges on a CIF basis), minus the unit net revenues of the other metals (the total net by-product credits).

Beyond 2010, our current "Life of Mine" plan estimates that cash mining costs will decrease significantly as the waste stripping required to access the ore is reduced as illustrated below, although the depreciation associated with deferred stripping expenditure will be brought to account during those later years in our income statement as these costs are amortised on a units of production basis.

Total Material Mined
(millions of bcm)



Like other mining operations, we seek to manage our cash cost relating to waste stripping within the confines of our overall mine plan.

Capital Expenditure Data and Forecasts

Other than the cost of waste stripping and trucking fleet replacement, our recurring capital expenditure requirements at Century are modest. Mobile mining fleet investment, represented in the table below for 2005, provides for replacement of some ancillary equipment. It is our current intention that additions to, and future replacement of existing trucks, shovels and loaders, will be through a combination of acquisitions and operating leases. These costs are included in our financial forecasts.

Capital Expenditure Profile

	Historical	Forecast	
	Fiscal Year Ended or Ending 30 June		
	2003	2004	2005
	(A$ millions)		
Compliance			
Health & Safety	0.8	1.2	1.7
Environment	0.2	2.0	3.2
Sustaining			
Asset Maintenance	5.5	6.8	9.9
Mobile Fleet	—	36.3	7.9
Mine Development (waste stripping)	113.5	117.5	143.9
Growth			
Commercial	6.5	—	2.0
Exploration	—	—	0.2
Total	126.5	163.8	168.8

Note 1: Our 2005 exploration investment programme provides A$0.2 million for near-mine targets.

Note 2: Our 2004 capital expenditure forecast includes A$30.9 million, which we expect to be paid in March 2004 (prior to listing), relating to the payment of the residual of the REJV lease.

We deferred capital expenditure in fiscal year 2003 in response to the historically low zinc price. This deferred capital is included in planned expenditure in fiscal year 2005 when we also will undertake a previously planned zinc recovery improvement project.

Zinc recovery could be increased by up to 1% to 82% in the fourth quarter of fiscal year 2005 for a total anticipated investment of A$2 million when we install a Jameson cell and undertake water system modifications to the carbon circuit. This technology has been successfully tested at a pilot scale. The project commissioning for the Jameson cell is planned for April 2005.

We are currently studying the feasibility and economics of further investment in improvements to the zinc rougher scalping, the ultrafine circuit, and the primary circuit flotation capacity. We are considering a potential investment of up to approximately A$19 million beyond fiscal year 2005, with indicated zinc recovery improvements of potentially up to a further 4% to approximately 86%.

Rosebery Mine

Background

Our Rosebery mine is a medium sized underground zinc, lead, silver, gold and copper mine located on the West Coast of Tasmania in Australia. Mining activities in this rugged, mountainous region commenced in the 1890s. The Rosebery site has operated continuously since 1936. Ore production has increased from around 600,000 tonnes in 2000 to approximately 800,000 tonnes in 2003.

Asset Strategy

Rosebery is a high quality polymetallic mine that generates strong free cash flow, even at the bottom of the commodity price cycle. Although it is medium in scale by world standards, Rosebery achieves a significant relative cost advantage after co-product credits compared to many of its global peers. Our strategy for Rosebery is to extend its economic life by finding extensions to the ore body to perpetuate the duration of its earnings stream.

Our strategic goal for Rosebery is to achieve a rolling six year "Life of Mine", broadly corresponding to an eight million tonne resource. The Rosebery ore body is open at depth and the mine has historically replaced and extended its resource for many years at a low discovery cost of approximately A$2.50 per tonne of ore resource. We expect our five year exploration programme, incorporated into the Life of Mine plan, to yield further resource and reserve extensions at a discovery cost of approximately A$3.00 per tonne to account for the increasing depth of the ore bodies. If successful, this exploration program has the potential to increase the current estimated mine life to at least 2013. For a description of our exploration programme, see "– Exploration and Development".

We also have opportunities to maximise operational cost efficiencies arising from the access decline completed in fiscal year 2003. We believe that these efficiencies will improve the earnings and cash flow generated by the mine.

Reserves and Resources

Rosebery's annually stated resource has varied between eight million tonnes and eleven million tonnes since 1970, with a consistently typical conversion rate from inferred resource to reserve of approximately 60%. We do not believe that the Rosebery ore body has been fully explored, because the ore body is open at depth and we have historically identified resource extensions. However, higher ventilation and haulage costs as the ore body deepens may alter the economics of the resource to reserve conversion.

Given the nature of the Rosebery ore body and the development drilling required to determine reserves, we currently estimate Rosebery's remaining mine life will be at least six years based on two years of reserves and our current expectations of converting approximately 60% of our inferred resources to reserves. Rosebery's ore reserves and resources as at 31 March 2003 are shown below.

Ore Reserves and Resources as at 31 March 2003

Reserves Category	Tonnes (000t)	Zinc (%)	Lead (%)	Copper (%)	Silver (g/t)	Gold (g/t)
Proved	1,902	11.6	3.8	0.42	133	2.0
Probable	388	16.5	4.5	0.38	150	2.1
Total	2,289	12.5	3.9	0.42	136	2.0
Resources Category[1]						
Measured	2,414	13.3	4.3	0.52	149	2.4
Indicated[2]	1,157	11.9	3.7	0.29	166	2.7
Inferred[3]	5,333	16.8	5.0	0.43	170	2.4
Total	8,905	15.2	4.6	0.44	164	2.4

(1) Includes reserves.

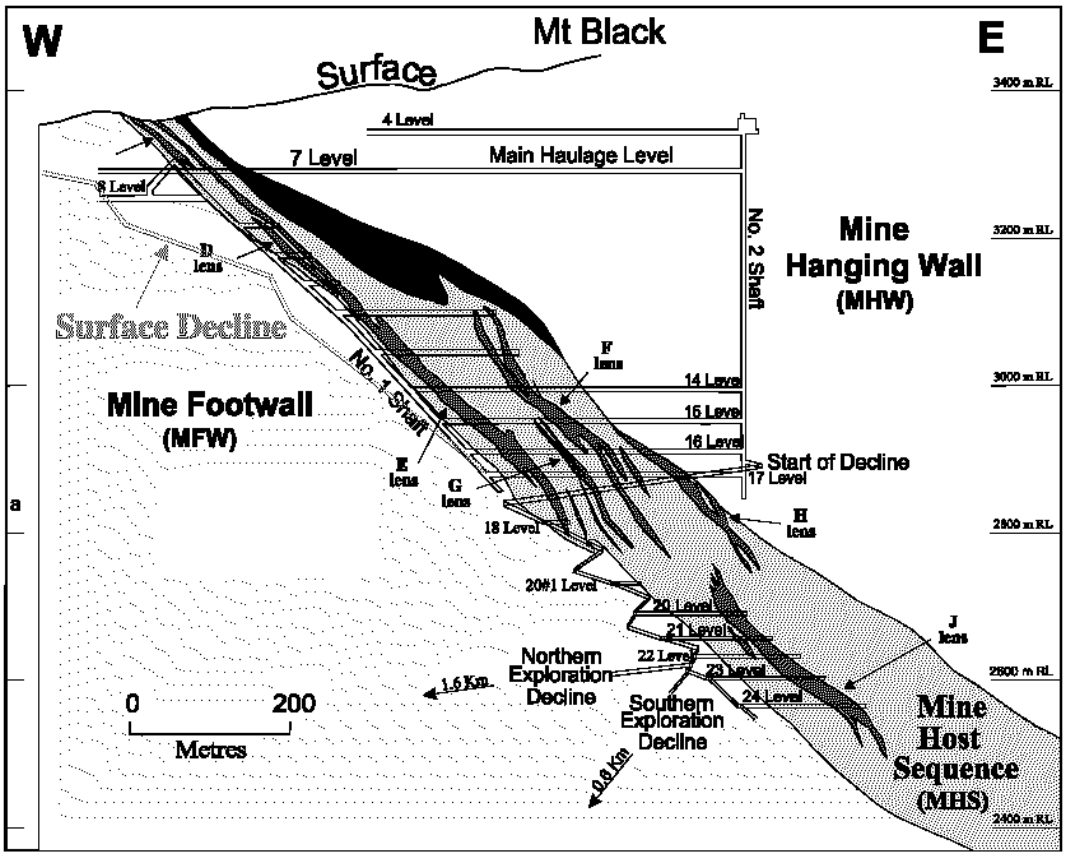
(2) Indicated Resource includes 520,000 tonnes of South Hercules resource.

(3) Inferred Resource includes 40,000 tonnes of South Hercules resource.

Operations and Process Description

Mining

Our Rosebery ore body extends 2.7 kilometres horizontally, in a series of lenses up to 20 metres wide, dipping at 45 degrees. Rosebery's most important minerals are fine-grained sphalerite (zinc) and galena (lead), with some tetrahedrite (silver) and some chalcopyrite (copper). A schematic cross section of the mine is illustrated below.



Our Rosebery mine uses mechanised underground mining methods, notably bench stoping, and sub-level open stoping with some mechanised cut-and-fill. Mining of ore left behind by historic mining operations is carried out above 17 Level, which is 300 metres below the surface.

We have progressively developed a network of rail haul ways, internal shafts and declines as ore has been discovered at greater depths. As a result, in the past, our multiple handling of ore and materials created extra expense. We successfully commissioned an A$10 million extension of a decline from the surface down to the 17 level, 180 metres below the surface in April 2003 which eliminated this complex infrastructure and improved Rosebery's mining economics.

With the completion of our access decline, we decommissioned all underground facilities including the haulage shaft, rail system, underground crusher and loading facilities, and we now truck all ore directly to the surface, eliminating multiple handling. We expect this project to reduce our mining costs by at least A$2 per tonne of ore mined and provide additional benefits, including increased flexibility, reduced maintenance, direct delivery of materials, and elimination of restrictions due to limitations of the aged shaft facility.

Our challenge of mining at depth has required us to undertake a number of other capital investments. We installed an A$9 million ventilation shaft to provide sufficient air to support our employees and machinery at deeper levels. Rock temperatures in the P and K areas (as shown above) have reached a level where working conditions are being affected and cooling of the incoming air is necessary. We have leased a refrigeration plant and installed it underground in the lower K decline on a trial basis before we make a decision on a larger capital installation. We increased our underground mining truck fleet capacity to offset increased haulage distances at a cost of A$4.2 million. We also have recently taken delivery of one new production drill and two new development drill rigs, and we have installed a new pump station and rising main.

Milling

Our current milling design capacity is around 850,000 tonnes per year. Over the last five years, our concentrator has been operating at 80 to 90 percent of capacity due to the addition of ore from other sources including Burns Peak. The increase in our ore mining rate at Rosebery has lifted concentrator utilisation to nearly 100%.

The relatively soft Rosebery ore undergoes two stages of crushing and two stages of grinding in ball mills to be reduced to 75 microns before beneficiation. Around 20% of all our gold is recovered by gravity separation and smelted on site before being sold as doré bullion. Copper/gold/silver, lead/silver and finally, zinc concentrates are progressively produced using sequential froth flotation.

Our metallurgical recoveries to concentrate are typically 90%, 80% and 55% for zinc, lead and copper, respectively. Our ratio of recovery of precious metals is very high, with 75% of our gold and 70% of our silver being recovered into bullion and lead or copper concentrates. Our zinc and lead recoveries have continued to improve with changes in mineralisation and improvements within the concentrator.

We installed an A$1 million fine grinding sand mill for lead regrind in January 2003. As a result, our metallurgy performance has improved with increased lead grades and recoveries of 1.0% and 3.1%, respectively, during the period of October 2002 to October 2003. Due to tight lead concentrate markets, Rosebery has been running with higher lead recovery, at the expense of grade, to optimise lead concentrate delivered to our Port Pirie smelter.

Concentrate Management and Logistics

Our concentrates are transported by rail using the Emu Bay Railway to the port of Burnie on the Northwest coast of Tasmania. The Emu Bay Railway is owned by TasRail Pty Ltd, which provides rail services to our mine under a 14-year contract that expires in 2012. Our product is loaded onto ocean going bulk carriers, with all zinc and lead concentrates transferred to our smelters in Hobart and Port Pirie. We sell our copper concentrate to Dowa Mining Company in Japan under a long-term arrangement, which has expired and is being re-negotiated.

Services and Infrastructure

Our Rosebery mine is well serviced by public infrastructure with electricity, water and road services provided by Tasmanian public and private third parties. Aurora Energy supplies electrical power to our Rosebery mine. We recently signed a new contract with Aurora Energy. We receive water through a cooperative arrangement with the West Coast Council. A highway connects Rosebery with the northern coastal city of Burnie, which is a 90 minute drive from Rosebery.

Management and Employees

Work practice changes and other reforms in recent years have caused a sizeable contraction of our workforce, from 244 permanent employees in 2000 to 193 in January 2004, following completion of the surface decline project in April 2003. We have a small management team, consisting of a General Manager, a Mine Manager, and a Mill Manager, directing our operations. Our employee turnover is low, averaging less than 5% per year over the last three years.

Our unionised employees accepted a two-year enterprise bargaining agreement in August 2002. This agreement enshrined the principle of reward for performance, and also left open the option for individual employees to negotiate their own working arrangements in the future. This agreement expires in August 2004.

From fiscal year 2002 to fiscal year 2003, we achieved a significant improvement in safety outcomes, with injury rates falling markedly. Our 12 month rolling average LTIFR decreased from 13 at June 2002 to 3 at June 2003. Our twelve month rolling average MRIFR decreased from 42 at June 2002 to 19 at June 2003.

Environmental Management

General

Our Rosebery mine has established an environmental management system that incorporates the exploration, surface and underground mining, milling operations, tailings dam management and ore stockpiling areas of the business. Our operation gained ISO 14001 accreditation for this site EMS in March 2003.

There is widespread environmental impact in the West Coast area of Tasmania from acid mine drainage, due to extensive historical mining activities. The site is committed to minimising adverse impacts on the environment from its current and future activities.

We have established a tailings strategy to address tailings dam capacity constraints over the next decade. Consulting engineering firm GH&D and Australian Tailings Consultants, have been engaged to help us to develop a monitoring and management strategy to ensure the stability of the dams over time, in compliance with national dam safety guidelines.

Material Environmental Issues.

For more information regarding the methodology which the Company has adopted to identify material environmental issues and estimate their rectification or remediation costs, you should read the first two paragraphs of "Business – Century Mine – Environmental Management – Material Environmental Issues" and read this summary in conjunction with those paragraphs, Annex D to the Institutional Offering Memorandum and Note 12 to the Pro Forma Historical Financial Information. A summary of our conclusions regarding material issues is outlined below. This summary of material environmental issues must be read in conjunction with the limitations and qualifications summarised in Annex D to this Institutional Offering Memorandum.

Hercules Mine Closure and Rehabilitation. Historical underground and surface workings have resulted in substantial rehabilitation requirements at the former Hercules mine, located approximately six kilometres south of Rosebery. Activities required include final rehabilitation of the upper surface areas including the former Mount Read township, fencing and making safe glory holes and plugging adits (including ongoing maintenance), and collection and treatment of mine seepage (including treatment costs). A number of cost estimates for various rehabilitation activities have been obtained by site management. We have used these as a basis to assess the likely cost for final closure and rehabilitation of the Hercules workings. Additionally, we have assumed a 100% likelihood for the occurrence of these works. We have also assumed that rehabilitation activities will commence in fiscal year 2004 and continue for four years to fiscal year 2008.

Hercules – Bakers Creek. It is expected that some earthworks will be required to reduce acid mine drainage impacts from Bakers Creek. We have assumed a 60% likelihood of these earthworks being required, with any such works occurring sometime between fiscal year 2008 and fiscal year 2013.

Rosebery Mine Closure and Rehabilitation. A detailed closure plan will be required for the site. This would include general site clean-up and rehabilitation; demolition of surface infrastructure; rehabilitation of the open cut and waste rock dump; plugging of former drillholes in the ore body to control final groundwater discharges; closure of Bobadil Tailings Dam; groundwater clean-up at Tailings Dams 2 and 5; partial capping of Tailings Dam 2; and, post closure monitoring and maintenance, particularly of the tailings dams. We have assumed for the

purpose of modelling that closure activities commence in fiscal year 2010 and have an ongoing monitoring component. After mine closure, treatment of seepage from beneath Tailings Dams 2 and 5 may continue to be achieved by passive treatment through existing wetlands. There is a risk, however, that passive treatment in the wetlands will fail and that active treatment through lime dosing will be required. We have assumed a 60% likelihood of the wetlands being successful.

Other Issues. Our review also assessed the risk and potential impact of the following issues at Rosebery as being material, but concluded that at the 80% confidence level utilised for planning purposes, the NPV discounted forecast financial impact was less than A$1 million. The risk was related to Historical Mine and Smelter Sites. Any change to the assumptions used to evaluate these particular risks, such as confidence level, estimated cost, timing or likelihood of occurrence could, however, increase this estimated financial impact.

Production

By global mining standards, Rosebery is a medium scale mine. The mine is an attractive asset because of its high-grade, polymetallic ore and low cost structure. Approximately 800,000 tonnes of ore are mined annually from deeper zones and from remnants of a mineral structure that has been mined for over 60 years.

The table below sets forth production statistics for our Rosebery mine for fiscal years 2001, 2002 and 2003 and our production forecasts for fiscal years 2004 and 2005.

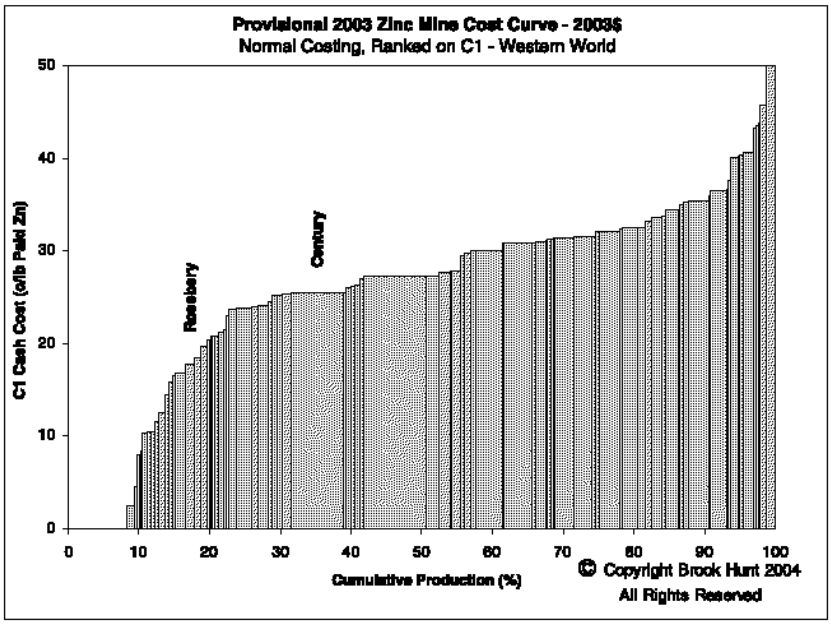
Production Data for Rosebery Mine

		Historical			Forecast	
		Fiscal Year Ended or Ending 30 June				
		2001	2002	2003	2004	2005
Ore tonnes processed	million tpa	0.73	0.76	0.81	0.79	0.76
Zinc grade of ore	%	11.1	11.5	11.4	12.2	13.1
Zinc recovery	%	89	90	88	88	90
Zinc concentrate produced	thousand tpa	129	139	142	149	157
Zinc concentrate grade	%	56.3	56.3	57.1	56.9	57.0
Contained zinc	thousand tpa	73	78	81	85	90
Lead concentrate produced	thousand tpa	41	36	42	43	41
Lead concentrate grade	%	65.3	67.2	62.5	63.5	63.0
Contained lead	thousand tpa	27	24	26	27	26
Silver in lead concentrate	g/t	1,275	1294	914	965	1,343
Copper concentrate produced	thousand tpa	6.6	5.6	7.2	7.8	5.5
Copper concentrate grade	%	22.8	21.9	20.2	21.4	23.0
Contained copper	thousand tpa	1.5	1.2	1.5	1.7	1.3
Silver in copper concentrate	g/t	5,958	4,563	2,968	2,969	3,635
Gold in copper concentrate	g/t	93	114	82	69	110
Gold doré	thousand tr oz	15.3	12.0	14.3	15.0	13.1

Operating Costs

Our Rosebery mine's cash costs are in the best 20% of Western World zinc producers after co-products credits. Rosebery's position on the Brook Hunt 2003 Normal C1 Cost Curve is shown below.

Brook Hunt 2003 Normal C1 Cost Curve (in US cents)



Brook Hunt's 2003 Normal C1 Cost Curve are modelled using base US dollar data in 2002 and estimates of 2003 exchange rates, inflation, metal prices and realisation charges. The full effect of exchange rate and inflation fluctuations in each country has been applied. Our operations have been plotted using forecast calendar year 2003 data supplied by us to Brook Hunt.

C1 Cost (direct cash cost) is the unit cost to concentrate (the cost of mining (other than cash mine development costs that have been deferred, to be recognized in future periods), concentrating and on-site general and administrative costs), plus the unit realisation costs (concentrate freight costs and treatment and refining charges on a CIF basis), minus the unit net revenues of the other metals (the total net by-product credits).

Capital Expenditure Profile

Our capital spending at Rosebery was reduced in fiscal year 2003 in response to historically low zinc prices. We deferred some of our capital expenditures pertaining to loader replacement and upgrades to underground ventilation and process control systems. These capital expenditures are now planned for fiscal years 2004 and 2005.

Capital Expenditure Profile

	Historical	Forecast	
	Fiscal Year Ended or Ending 30 June		
	2003	2004	2005
		(A$ millions)	
Compliance:			
Health & Safety	0.4	0.5	3.1
Environment	3.2	1.3	2.1
Sustaining:			
Asset Maintenance (Mobile Fleet)	5.4	1.4	3.1
Mine Development	7.7	8.2	10.4
Growth:			
Commercial	7.1	2.4	7.3
Exploration	0.0	1.5	3.0
Total	23.8	15.3	29.0

Major expenditure is anticipated for loader and truck replacements to ensure capacity is maintained and improved, and the lifting of the Bobadil Tailings Embankment wall to meet environmental compliance/ operational requirements at a cost of A$1.1 million. In addition, provisions are made in fiscal year 2005 for a new underground truck route, plus A$5.2 million for upgrades to ventilation fans, an underground refrigeration plant and the safety, health and environment and business systems. Exploration expenditure increases to A$3.0 million in fiscal year 2005. See "– Exploration, Resource Acquisition and Development" for additional information regarding our exploration expenditures.

Exploration, Resource Acquisition and Development

We presently hold an integrated set of mining and smelting assets balanced in the mining and smelting of zinc. Our strategy is to maintain an integrated position across these two asset classes, albeit with a gradually increasing focus over time on mining where we expect potential returns to be greater than in smelting.

We have established an exploration and resource and reserve renewal strategy. We have planned exploration activities that we expect to fund from cash from operations in fiscal year 2005.

We characterise our exploration efforts into three distinct sectors, each with specific strategic objectives and programmes. These sectors are:

- *Sector 1 – Greenfield*: We are targeting worldscale resources with contained metal of greater than 5 million tonnes, corresponding approximately to ore bodies greater than 50 million tonnes. Both exploration for new discoveries in prospective base metal acreage and development of existing discoveries with partners may be contemplated. Currently, our only Sector 1 exploration or resource development programme is our Dugald River deposit.

- *Sector 2 - Regional*: Satellite deposits are sought in regions associated with operating mines, where the existing infrastructure and knowledge of the geology provides us with a relative advantage. Resources with contained metal greater than 1 million tonnes, corresponding approximately to ore bodies of 10 million tonnes or greater, are targeted. A Century region exploration programme is planned beginning in fiscal year 2004.

- *Sector 3 – Near Mine*: Additions to resources and reserves associated with existing ore bodies are targeted to replace reserves mined and extend economic mine life. Rosebery's mining lease exploration programme is planned to expand from fiscal year 2005. There are also on-lease targets at Century that are planned for drilling in fiscal year 2005.

We plan to pursue exploration activities in regional and near mine areas. During 2004, the Company may re-evaluate its future strategy with regard to the development of, acquisition of, or exploration for new major resources.

Sector 1 - Greenfield: Dugald River

The Dugald River deposit is a significant resource estimated to contain 48 million tonnes of ore grading 12.1% zinc, 2.1% lead and 44 grams per tonne silver at a 10% lead and zinc cut-off. The estimated 5 million tonnes of contained zinc in the resource is approximately half the size of the original Century reserve. The Dugald River deposit is well located, approximately 50 kilometres northeast of Mount Isa in Northwest Queensland close to power, water, mine services and transport to market.

Mineral Resources Estimates for Dugald River, as at 31 March 2002

Resources Category	Tonnes (million)	Zinc (%)	Lead (%)	Silver (g/t)
Measured	—	—	—	—
Indicated	31.9	12.6	2.0	44
Inferred	16.0	11.1	2.3	44
Total	47.9	12.1	2.1	44

Development of Dugald River has been constrained by the relatively high manganese content in the zinc concentrate that cannot readily be treated by electrolytic smelters. Several new processes have been identified that may offer an economic solution to the manganese issue. We plan to evaluate each of these technologies, which include:

- An electrolytic process selected by Anglo American for its Gamsberg project in South Africa, whereby manganese is removed ahead of zinc electrolysis.

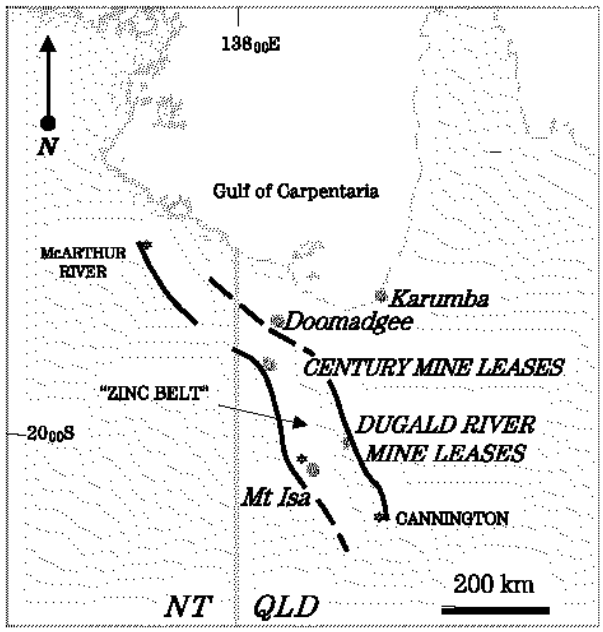
- Intec's halide-based hydrometallurgical process that would reject manganese and produce zinc metal at the mine site. This requires large capital investment, and intensive electricity use. Construction of a refinery would be a significant additional investment cost for the project. Electrical power used for the electrolysis step is the major operating cost.

- A new hydrometallurgical technology, that is under development within the Company. This technology would permit a separation of the manganese and production of a zinc chemical intermediate product at the mine site. By this means, the energy intensive electrolysis step can be conducted in existing refineries. We are planning pilot plant studies for fiscal year 2005 and considering a Century-based demonstration facility in fiscal year 2006.

A solution to the issue of manganese in Dugald River ore could facilitate the commercial exploitation of this significant deposit.

Sector 2 - Regional: Century Region

The Century mine is located in a highly mineralised base metal mineral province, as illustrated below.



Given the existing mill and infrastructure at Century, plus the handling and ship loading facilities at Karumba, there is an opportunity to exploit deposits that may otherwise be sub-economic. Discovery of satellite economic resources would extend the operational life of Century, and defer closure and remediation costs.

Five years of mining has generated a considerable knowledge of the complex geology that formed the Century ore body. Based on this data, plus a large body of regional information, some publicly available and some available to members of the Co-operative Research Centre for Predictive Mineral Discovery such as ourselves, we are planning the development of a three dimensional model of regional geology.

We anticipate that the model will generate a number of Century style satellite targets based on fault structures along the Termite Range Fault corridor. The Company is currently evaluating access to a number of prospective areas in the vicinity of Century, although no exploration tenements have been secured at this time. In addition to regional targets, near mine prospects of potential displaced ore blocks will be tested. A new exploration programme is planned to begin in fiscal year 2004.

Sector 3 – Near Mine: Rosebery Extension

Historical exploration success rates have been high, with the Rosebery resource base varying between 8 million tonnes and 11 million tonnes since 1970. The resource is open at depth.

Expenditure of up to A$15 million over five years on mine exploration is planned, seeking to increase reserves by approximately 3 million tonnes (equivalent to an estimated 5 million tonnes of incremental resource at historic resource to reserve conversion rates). The programme is based on an approximate historical discovery cost of A$2.50 per tonne of resource, increased to A$3.00 per tonne to account for the increasing depth of the ore bodies, which will require additional ventilation, access and air refrigeration infrastructure. Furthermore, our reductions in exploration activity during fiscal years 2002 and 2003 will initially slow the addition of resources and the increased depth of new discoveries may reduce our conversion rate of resources to reserves. If successful, this exploration programme has the potential to increase the current estimated mine life to at least 2013.

Additionally, Zinifex holds exploration tenements covering geologically significant areas on the west coast of Tasmania. We anticipate exploring them in the future.

Smelting Operations

We own and operate two smelters in Australia – the Hobart electrolytic zinc smelter and the Port Pirie lead and zinc smelter. We also operate one of Europe's largest and most efficient zinc smelters at Budel in The Netherlands and an electrolytic zinc smelter in Clarksville in the United States. In addition, we participate in the lead recycling business through an interest in small secondary lead smelters located in Sydney and Melbourne in Australia. Most concentrate requirements for our smelters are provided by our Century and Rosebery mines, which provide a stable and secure source of feed.

Our recent historic results for our smelters in fiscal year 2003 are provided in the table below for certain key indices of operational performance.

2002-2003 Average Key Operational Performance Indices – Smelters

	Hobart Zinc	Budel Zinc	Clarksville Zinc	Port Pirie Zinc	Port Pirie Lead
Metal Production, tonnes	253,400	212,100	110,200	43,000	267,500
Roaster Utilization, %	93.5	92.6	92.4	—	—
Sinter Plant Utilization, %	—	—	—	—	87.7
Current Efficiency, %	90.9	92.5	91.1	87.0	—
Electrolysis Power, kW-h/t Zn	3,350	3,116	3,165	3,470	—
Overall Zinc Recovery, %	91.4	98.2	95.8	89.0	—
Overall Lead Recovery, %	—	—	—	—	99.5
Cash Conversion Cost[1], A$/t (metal)	468	617	768	1,086	334

(1) Excludes by-product credits

Hobart Smelter

Background

Hobart Smelter is situated on one hundred hectares of Company-owned freehold industrial land adjacent to the residential suburb of Lutana in Tasmania's capital city, Hobart. Plant operations are approximately five kilometres from the city centre.

Zinc smelting at the site dates back to November 1916 when a small pilot plant was built, before rapid expansion into the world's largest zinc smelter by the early 1920s. The operation was a pioneer in the use of electrolytic technology, which today is the most commonly used and cost effective zinc smelting process.

Asset Strategy

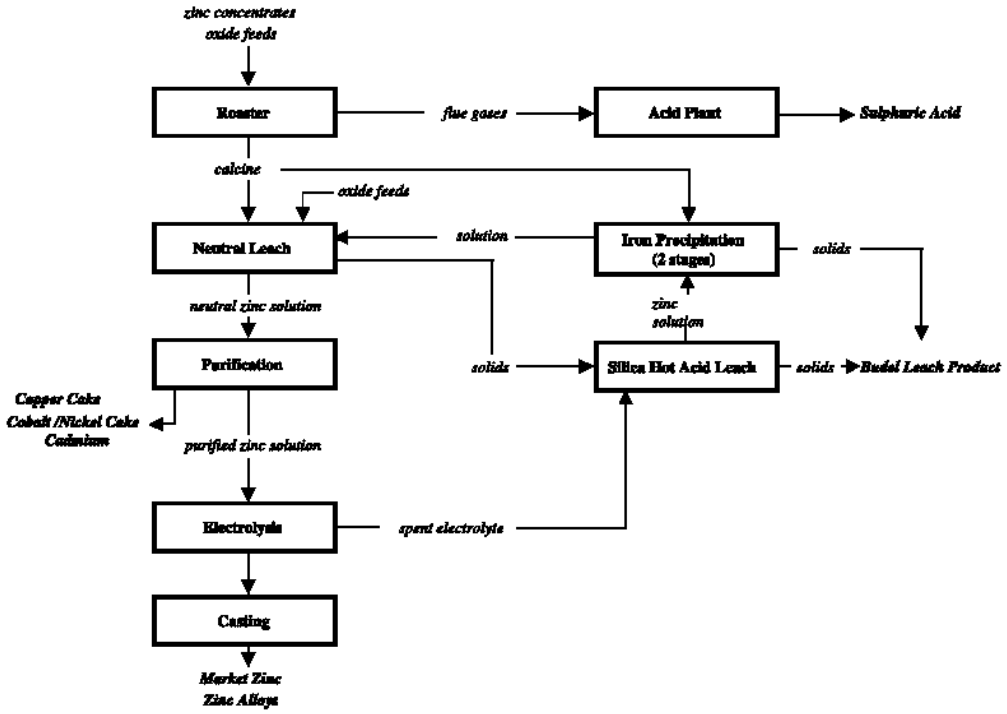
Our Hobart smelter is a worldscale asset that is focused on premium products for export to growing markets in Asia. While its power costs are low, its location is remote from its markets and many of its feedstock sources. Hobart and Port Pirie smelters are strategically linked in connection with by-product residue flows. The site's strategy seeks to build on its present competitive scale and product strengths, while containing the cost of sustaining its process plant and infrastructure. Significant elements of our strategy are:

- Invest in low cost capacity expansions that build scale and increase cost efficiency.
- Increase production of premium margin alloy products to enable us to capitalise on rapidly growing demand within Asian markets, particularly China.
- Maintain margin enhancing supply arrangements on export commodity products.

- Complete conversion to 70% Century concentrates at minimum cost, to meet by-product reduction targets.
- Accelerate realisation of metal value from on site by-product stockpiles.
- Contain costs of power supply and seek sustainable efficiencies in supply chain working capital.
- Complete refurbishment of process plant and infrastructure, utilising capital efficient techniques.

Operations and Process Description

A general flowsheet of our Hobart operations is presented below.



Roasting

The first stage of the process involves roasting of zinc sulphide concentrates to release sulphur that is then converted to sulphuric acid in two contact acid plants. Acid plant tail gases are cleaned through a recently modernised scrubbing facility to minimise stack sulphur dioxide emission. The oxidised zinc produced by the roasting process is known as calcine.

The two roasters were commissioned in 1969 and 1975, and until 2001, each was shut down every two years to allow for inspection and maintenance. We have determined that campaigns can be extended to four years with the assistance of sophisticated condition monitoring to pick up early warning signs of maintenance issues.

Leaching

The subsequent leaching stage involves a complex, five-stage process to progressively extract most of the contained zinc. Calcine from the roasting operation is subjected to neutral leaching, hot acid leaching and strong

acid leaching. This produces an impure zinc sulphate solution, and leaves a silver and lead containing by-product which is sold externally. Iron is removed as paragoethite by-product, which contains small amounts of zinc, lead, silver and sulphur. Paragoethite is processed at Port Pirie smelter where contained lead and zinc is recovered.

Purification

In purification, addition of zinc dust displaces metallic impurities from the zinc sulphate solution. Copper is recovered as a copper sulphate by-product, and cadmium metal is also recovered for sale through a small electrolytic cadmium plant. Both the leach and purification processes have been upgraded and modernised since 1990.

Electrolysis

Zinc is removed from the purified solution when an electric current is passed through it, resulting in zinc metal being deposited on to the cathode. The operation is electrically efficient, with its current efficiency competitive with other leading electrolytic operations. Cell-house current efficiency has recently improved and is presently about 90.5%, which is still below historic achievements of 91.7%. Power consumption of about 3300 kilowatt hours per tonne is high compared with more modern plants. A number of actions are planned to improve the current efficiency to 91.5% in fiscal year 2005. The electrolysis section applies computerisation and automation, including the mechanised stripping of zinc from cathodes.

Casting

Zinc cathodes are melted, alloyed and cast using electric induction furnaces and a series of slab-mould and block-mould casting facilities. This plant was constructed in 1970, with casting lines since upgraded, and a mechanical product stacker/strapper installed.

Feedstocks

We intend to progressively replace third-party concentrates with additional Century concentrates and expect to be in a position to source 70% of our concentrates from Century around December 2006. At that time, we expect all of our feedstock will be sourced from Zinifex mines.

The table below sets forth our feedstock sources for the past three fiscal years and our estimates for fiscal years 2004 and 2005.

	Historical			Forecast	
	Fiscal Year Ended or Ending 30 June				
	2001	2002	2003	2004	2005
Concentrate Feeds (tonnes)					
Broken Hill (Perilya)	134,973	177,944	156,059	130,528	134,200
Endeavour (Consolidated Broken Hill)	52,991	45,901	58,060	60,924	59,000
Rosebery	125,848	140,176	140,701	146,325	157,100
Century	13,756	62,751	47,047	128,140	153,000
Other External	133,087	75,610	87,999	34,250	13,800
Total Concentrates	460,664	502,382	489,866	500,167	517,100

We will need to make process modifications to enable a significant increase in the proportion of Century feed, although we will maintain sufficient flexibility to treat concentrates from other sources as well. Nevertheless, we are currently able to source up to 50% of our feedstock from Century with no additional capital requirement.

Apart from the advantages of continued internal supply, our Century concentrate offers substantially lower iron input. This will reduce production of paragoethite by-product enabling Port Pirie to meet paragoethite storage requirements agreed with the South Australia Environmental Protection Agency ("SA EPA"). Additionally, our Hobart smelter benefits directly from its increased zinc recovery, although overall zinc recovery across the integrated Hobart-Port Pirie assets is unchanged. Although paragoethite production falls, the amount of contained germanium within paragoethite will increase. Accordingly, we may need to make related investments at the Port Pirie smelter to treat the changed paragoethite.

Production

Our Hobart smelter is one of the largest zinc operations in the world, producing more than 250,000 tonnes of zinc metal in fiscal year 2003, as well as other associated metals and by-products. We also own a dedicated port facility that handles concentrate delivery and despatch of by-products. Our Hobart operation is a large scale, internationally competitive facility that produces premium zinc products.

Hobart's key products are special high grade or SHG zinc (99.995% purity), used chiefly in galvanizing, a zinc/aluminium alloy known as CGG, the specialised EZDA, and a zinc-lead alloy used to encase batteries. EZDA is Hobart's highest margin product and it is marketed at premium prices into China, the world's fastest growing diecasting market.

We have significantly upgraded many parts of the plant over the last 30 years. We have installed fluid bed roasters, redesigned and reconstructed leach and purification processes, introduced mechanized zinc stripping to electrolysis and rebuilt the casting plant. These major capital works lifted Hobart's annual capacity from 170,000 tonnes in 1977 to around 210,000 tonnes by the 1990s.

Operational improvements and process de-bottlenecking have increased this figure to more than 250,000 tonnes, at low capital cost. We have planned de-bottlenecking in the roaster section to enable the site to reach planned production levels of 260,000 tonnes beyond fiscal year 2005. Furthermore, we are planning to increase our EZDA production to 215,000 tonnes over approximately the next five years.

The tables below set out our production for our past three fiscal years and our estimates for fiscal years 2004 and 2005.

	Historical			Forecast	
	Fiscal Year Ended or Ending 30 June				
	2001	2002	2003	2004	2005
Total Production Data (tonnes)					
Zinc	233,070	251,667	253,434	257,000	258,000
Cadmium	258	315	347	328	350
HLP2	30,772	38,376	26,321	27,381	29,631
Dry Limed Paragoethite	104,367	124,055	120,512	125,676	109,806
Copper Sulphate	2,982	1,929	2,464	2,060	2,531
Sulphuric Acid	403,021	431,471	425,792	435,155	435,868

	Historical			Forecast	
	Fiscal Year Ended or Ending 30 June				
	2001	2002	2003	2004	2005
Alloy Production Data (tonnes)					
Zinc Alloys CGG	39,412	14,904	15,214	12,419	0
Zinc Alloys EZDA	97,200	109,601	122,366	127,690	167,000
Zinc Alloys Other – Battery	10,612	13,043	8,354	7,367	3,200
Total Zinc Alloys	147,741	136,482	145,934	147,476	170,200
Zinc SHG	83,809	114,119	107,500	109,527	87,800

By-Products

The site produces more than 420,000 tonnes of high quality sulphuric acid per year, which is sold mainly for use in superphosphate fertiliser production. A major customer is the neighbouring Impact fertiliser plant, which occupies part of our site.

More than 300 tonnes of cadmium metal is produced annually and sold to Chinese, European, New Zealand and American cadmium/nickel battery producers. Around 2,500 tonnes per year of copper sulphate is sold to mining operations for use in the floatation process, while industrial galvanisers purchase the site's annual 5,000 tonne production of zinc dross under a memorandum of understanding.

Approximately 110,000 tonnes of paragoethite is produced per year, and shipped to Port Pirie for treatment. Port Pirie treats approximately 65% of this paragoethite, and stockpiles the remainder for later treatment. Hobart also produces approximately 28,000 tonnes of Lead Sulphate Leach Concentrate that is sold externally, with the option to treat a portion at Port Pirie.

Marketing

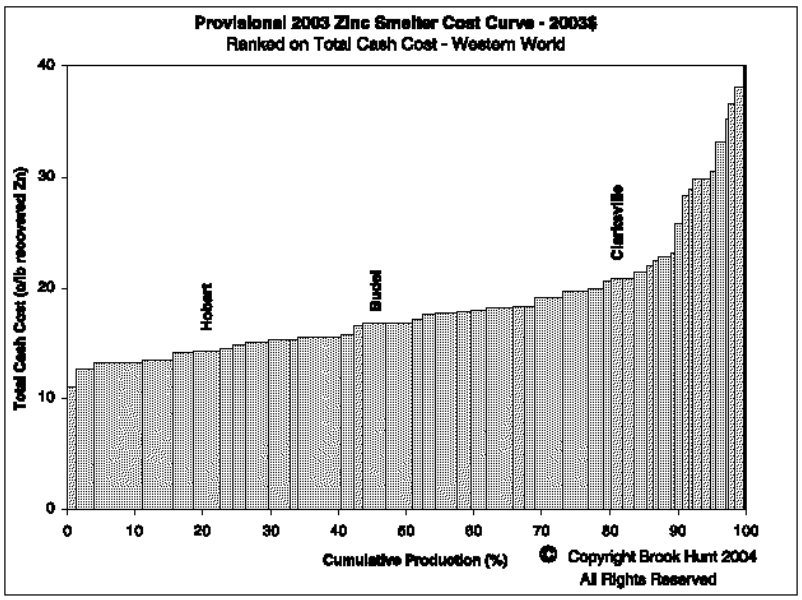
Hobart smelter brands are long-established in its key Asian markets. Hobart's principal products include EZDA, and CGG, both premium products generating increasing levels of demand in the rapidly growing Asian market, particularly in China and Taiwan.

In addition to its focus on premium margin products, marketing of Hobart's commodity SHG grade has recently changed through a long-term sales arrangement with Trafigura. See "– Marketing and Sales – Zinc Marketing and Sales".

Operating Costs

The scale and premium product advantages of our Hobart smelter are partially offset by our higher freight costs products. At provisional 2003 conditions, Hobart is positioned in the best 25% on the Western World industry cost curve, as illustrated below in Brook Hunt's 2003 Total Cost Curve analysis.

Brook Hunt 2003 Total Cost Curve (in US cents)



Brook Hunt's 2003 Total Cost Curves are modelled using base US dollar data for 2002 and estimates of 2003 exchange rates, inflation, metal prices and realisation charges. The full effect of exchange rate and inflation fluctuations in each country has been applied. Our operations have been plotted using forecast calendar year 2003 data supplied by us to Brook Hunt.

Total cash costs for each smelter are determined by analysis of the principal cost components, namely labour, net energy, maintenance materials, consumables and other on-site costs. A credit is given for power generated from, or the sale of, steam from waste heat boilers to arrive at the net energy cost. Total cash costs for each smelter do not include any capital expenditures or depreciation of earlier capital expenditures.

Power and Utilities

The Hobart smelter is the second largest consumer of electricity in Tasmania, drawing a continuous load of approximately 120 megawatts. Its current contract with Aurora Energy expires in 2007. Maintaining access to this source of low-cost power is important to the site's competitive cost position.

Agreement in principle has been gained with Aurora to commence power contract negotiations prior to 2007, during which time the influence of the new Bass Strait power link between Tasmania and the Australian mainland (Basslink) on Tasmanian grid operation will be known. A number of opportunities exist for Hobart to leverage its significant, and flat load profile (attractive to Aurora), to minimise the amount of any future price rises. Opportunities include short-term load shedding to alleviate system problems, and potentially small load reductions to reduce demand at system peaks.

Transport

The site owns a committed, deep water, port facility at the smelter site. The facility is operated by Toll Transport and the Hobart Ports Corporation. All concentrate feedstock and by-products are shipped in bulk through the facility, while zinc metal product is currently trucked to a third-party facility in Hobart from where it is shipped.

Management and Employees

The Hobart smelter has an experienced workforce of approximately 560 employees. Unionised employees currently work under a two-year Enterprise Bargaining Agreement that fell due for renewal in November 2003, and is currently being renegotiated.

The site's safety record, although still high by company and industry standards, has improved significantly in recent years, with the 12 month rolling average MRIFR down from 102 in June 2002 to 68 at 30 June 2003. The LTIFR also decreased over the same period to 23.

Although contact with lead containing material is a relatively low risk in Hobart's operations, each employee is monitored for lead in blood levels, and there are strict controls in place once certain trigger points are activated. Our trigger points for management intervention are at lower levels than those required by applicable legislation.

Environmental Management

General

Despite the challenge of dealing with many historical and current environmental issues, Hobart has been recognised as a proactive and successful environmental manager. In June 2002, the site's groundwater recovery programme was awarded the Minister's Award and Minerals Processing Award at the Tasmanian Awards for Environmental Excellence. The award was the site's third in four years. Its innovative conversion of former gypsum residue for use in cement manufacture won an award in 2000, while its employee and community environmental education programme was recognised in 1999.

Over the past ten years, a major focus for Hobart has been implementing a strategy to eliminate stockpiles of a range of by-products and residues. In consultation with the Department of Primary Industries, Water and

Environment ("DPIWE"), these historical stockpiles are being progressively recovered for further treatment at the site or other owned smelters.

The introduction of an increased proportion of Century concentrates to Hobart is an integral part of the Port Pirie by-product elimination plan. Low-iron Century concentrates will significantly reduce the current Hobart production of paragoethite, freeing up Port Pirie's capacity to reprocess paragoethite and Hobart's historical stockpiles.

The smelter is an active participant in the Derwent Estuary Program, a joint State, Local and Commonwealth Government initiative to restore and protect the Derwent Estuary. The DEP's report cards show that there have been several very significant reductions in pollutant loads to the Derwent since 1996. Heavy metals discharged by industry have reduced by more than 50%, with site improvements at the Hobart site largely responsible for this reduction.

Historical smelting operations have led to a legacy of elevated lead and cadmium levels in soil around the smelter. A series of biological tests organised by the Government-run Lutana Soil Contamination Working Group in the mid 1990s however, showed no demonstrable impact on human health. In the most recent survey conducted by the Menzies Centre in 1997, average lead in blood levels for local children under five years of age were similar to the national and state averages.

Material Environmental Issues.

For more information regarding the methodology which the Company has adopted to identify material environmental issues and estimate their rectification or remediation costs, you should read the first two paragraphs of "Business – Century Mine – Environmental Management – Material Environmental Issues" and read this summary in conjunction with those paragraphs, Annex D to this Institutional Offering Memorandum and Note 12 to the Pro Forma Historical Financial Information. A summary of our conclusions regarding material issues is outlined below. This summary of material environmental issues must be read in conjunction with the limitations and qualifications summarised in Annex D to this Institutional Offering Memorandum.

Surface and Ground Water Management. The site discharges surface water and groundwater to New Town Bay, the Derwent River Estuary and Prince of Wales Bay. Stormwater runoff exceeds discharge criteria during storm events and there is evidence of contaminated groundwater flow to the Derwent River. To manage ground water contamination and ensure surface runoff meets discharge criteria, the site is implementing surface water and ground water management strategies, including interception and treatment in the current site treatment plant. Management activities are already underway. Our assumptions are based on likely groundwater management costs for horizontal drains and trenches. We have assumed these activities will occur for a 15-year period from fiscal year 2004 to fiscal year 2018, and that there is a 100% likelihood for these requirements.

Wharf Dust Management. Dust emissions at the wharf arise from the unloading of concentrates and phosphate rock, and the loading of HLP1. General dust management measures are required, and potential improvements including enclosing the conveyor system, improving sealing and wetting of the wharf are possible. Management activities will commence in 2004 and we have assumed that they will continue for 10 years to fiscal year 2014. Further, we have assumed a 40 to 60% likelihood that we will be required to implement major capital improvements such as enclosing the conveyor system, improving sealing and wetting of the wharf.

SOx and NOx Emission Controls. The use of Century concentrates can result in a visible plume from the stack at Hobart. Proposed emission controls include chemical dosing in the shorter term, and an electrostatic mist precipitator as higher amounts of Century concentrate are treated. We have assumed a 100% likelihood for the new controls and a mist precipitator. There is a possibility that additional controls such as a de-NOx plant also may be required in the longer term, and we have assumed a 10% probability of this occurring. Additionally, we have assumed that emission control investment will commence in fiscal year 2006 and continue for three years to fiscal year 2009.

Manganese Dioxide Stockpile. Manganese exists as an impurity in the concentrates processed on site. Current production is sent to Port Pirie for treatment, however an existing stockpile of around 80,000 to 90,000 tonnes of historical material is stored on site and will require disposal in the future. We have assumed that disposal activities will commence in fiscal year 2014 and continue for four years to fiscal year 2018.

Jarosite Stockpile Offsite Containment. 200,000 tonnes of jarosite and jarosite-contaminated material is stored in a secure landfill cell on site, with a DPIWE requirement to remove it by 2016. Offsite disposal activities have been modelled to commence any time between fiscal year 2016 and fiscal year 2019. We have assumed a 100% likelihood of offsite disposal being required.

Timber Disposal. There are 20,000 to 30,000 tonnes of contaminated timber on site from previous demolition works that will require disposal. We have assumed a 30% likelihood that this timber will be able to be disposed to a waste energy incinerator that is currently under a development permit in Hobart. The cost estimate also includes a costing for alternative disposal if the incinerator option does not proceed. We have assumed that these disposal activities commence any time between fiscal year 2008 and fiscal year 2019.

Acid Tanks Bunding. Upgrade of the bunding for the concentrated acid storage tanks, including upgrade of bunding, new pipelines and construction of shielding for tanks, is required to meet compliance. Upgrade activities have commenced. We have assumed that these activities will be completed in fiscal year 2005, and that there is a 100% likelihood for this expenditure in fiscal years 2004 and 2005. It is noted that while compliance with bunding standards will reduce the risk associated with tank failure, it would not completely eliminate the risk as the standards do not require the bunding to be able to contain multiple tank failures. We consider it unlikely for this to occur. Further, we have assumed that while it may be necessary in the future to upgrade the acid tanks inside the bunding, this is an asset maintenance issue, rather than an environmental liability, and has not been factored into our cost estimate.

Soil and Groundwater Remediation. Soil and groundwater contamination exists on site as a result of industrial operations since 1916. Extensive site clean-up of soils may only be required on final closure or disposal of the site. After site closure, contaminated groundwater will require ongoing treatment. We have assumed that remediation activities will commence at site closure, (assumed to be in sixty years time). Our modelling assumed a 100% likelihood of occurrence of this work at site closure.

Burnie Port. Hobart previously supplied acid to customers in northern Tasmania via a facility at Burnie Port. This facility is redundant and we assume there is a 100% likelihood that infrastructure will be removed, and a 70% likelihood that cleanup of soil contamination will proceed.

Other Issues. Our review also assessed the risk and potential impact of the following issues at Hobart as being material, but concluded that at the 80% confidence level utilised for planning purposes, the NPV discounted forecast financial impact was less than A$1 million. These risks were related to Contaminated Soil Stockpile, Contaminated Sediments, and HLP1 Stockpile Disposal. Any change to the assumptions used to evaluate these particular risks, such as confidence level, estimated cost, timing or likelihood of occurrence could however increase this estimated financial impact.

Capital Expenditure Profile

Our long-term strategic plan provides for capital expenditure on major campaign shutdowns, with costs greater than A$5 million, to recur less frequently. For example, we plan to conduct roaster shutdowns every four years rather than every two years and plan to conduct smaller scale roaster shutdowns in the intervening years. Sustaining capital, including structural recovery and compliance, is expected to remain at an average of A$22 million per year at Hobart over the medium term to longer term.

We curtailed capital spending in fiscal year 2003 in response to the historically low zinc price. Some of this capital, including A$1.5 million for two stage leaching process changes, was deferred rather than removed. We expect to spend this capital over fiscal years 2004 and 2005.

Investment is planned for process modifications to enable continuous processing of 70% Century concentrates beyond fiscal year 2006 onwards, currently estimated to cost less than A$20 million. Key projects include installing increased thickening capacity in the leach plant (to account for Century's higher silica content), improving calcine grinding capability to increase zinc recovery and installing additional mist precipitators to reduce the visibility of the tail gas plume.

Major sustaining capital projects include electrolysis cell replacements (an A$4.8 million project, which is in progress), replacement of electrolysis feed tanks (an A$6.6 million project, as at 29 February 2004) and upgrade of an electrolysis unit, including spent electrolyte cooling and refurbishment of cell piers (A$6 million over the period from fiscal year 2004 through fiscal year 2007). Upgrades and replacement of high-voltage electrical sub-stations planned for ongoing works starting in fiscal year 2005 are estimated to cost A$10.7 million.

Our major growth opportunity at Hobart is to increase the production of high margin EZDA for supply to customers in Asia, particularly China where we expect demand for these products to grow at 8% in 2004.

We expect to expand Hobart's capacity to produce EZDA from the current 135,000 tonnes to 215,000 tonnes over approximately five years. We are planning an initial expansion of 50,000 tonnes, to 185,000 tonnes per year, by fiscal year 2005 through the conversion of a second casting line for EZDA production, at an estimated cost of A$1.9 million. This project includes the purchase of an automated stacker that limits ongoing operating costs and minimises future worker health and safety risks.

Hobart Capital Expenditure Plan

	Historical	Forecast	
	Fiscal Year Ended or Ending 30 June		
	2003	2004	2005
		(A$ million)	
Compliance			
Health & Safety	2.0	1.1	5.2
Environment	5.8	2.2	3.7
Sustaining			
Asset Maintenance	7.6	10.0	15.3
Maintenance Shutdowns	5.3	3.9	5.9
Growth			
Commercial	1.8	1.9	1.2
Total	22.5	19.1	31.3

Budel

Background

The electrolytic Budel smelter is located on a 200 hectare site at Budel Dorplein in The Netherlands, close to the Belgian border. The current electrolytic plant was commissioned in 1973, replacing the thermal zinc recovery operation that had existed on the site since 1892. Budel also owns approximately 550 hectares of adjacent land.

Asset Strategy

Budel is a worldscale asset located close to its markets. It is domiciled in a relatively high cost country and thus its net cash margin is correspondingly sensitive to zinc prices and exchange rates. The site's strategy seeks to strengthen its earning capacity and reduce the capital employed in the business. Major dimensions of this strategy are to:

- invest in low cost capacity expansions that build scale and thus increase cost efficiency, meeting demand in the European market, which is in deficit following recent industry capacity rationalization;

- build site revenue margins by growing Budel's market share of premium margin alloy products;
- minimise and seek deferral of government mandated environment provisions until free cash flow improves;
- seek structural cost efficiencies in power supply rates and utilise our existing stockpile of inventory of concentrates;
- maintain concentrate inventories at minimum levels; and
- develop and sell non-essential land surrounding the site.

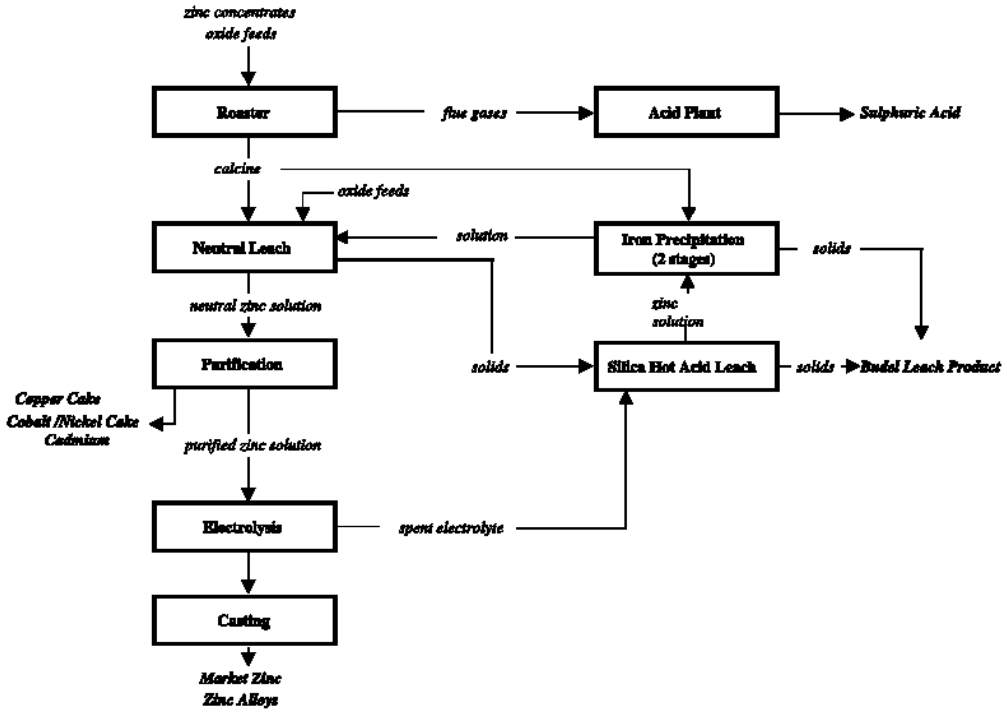
Operations and Process Description

In 2000, the Budel process was modified significantly to allow for the conversion to Century concentrates. Since the conversion, the single concentrate feed to roasting has delivered a more stable process, with both the leaching and purification sections able to be operated without unexpected changes in minor element composition, which formerly occurred as a result of a feed-blend change.

The special nature of Century concentrates has provided other more specific benefits. Steam production has increased due to the higher carbon content, while steam consumption is lower because of reduced volumetric flows brought about by lower magnesium levels. With steam production now exceeding plant demand, natural gas consumption is lower.

Reduced magnesium in zinc liquors has cut power consumption in the cellhouse by around 5%, and our current efficiency has increased to approximately 93%. Zinc dust use in purification is 25% lower than historical levels due to the lower cobalt, copper and magnesium levels in Century concentrate.

A general flowsheet of our Budel operations is presented below.



Roasting

Zinc concentrates are roasted in two fluidised bed roasters that desulphurise the material to form calcine (zinc oxide) and sulphur dioxide gas. Sulphur dioxide is converted to acid in a 5 step catalytic conversion, double-absorption acid plant. The acid plant was modified for Century concentrates with the installation of equipment to remove nitrous oxides and reduce sulphur dioxide in the tail-gas stream.

Leaching

Major changes have been made to the leaching circuit to manage the special characteristics of Century concentrate, which is low in iron, high in silica, high in germanium and relatively high in lead and silver. Traditional zinc leaching processes are limited in their ability to treat high-silica materials. The key change to the Budel leaching circuit has been to increase retention time in the leaching process by 35% so that the dissolution and then re-precipitation of the silica content of Century concentrate can be carefully controlled. The leaching process comprises three process steps: Neutral Leach, Iron Precipitation and Silica Hot Acid Leach.

Purification

In a two-stage process, zinc dust produced on-site is added to the zinc solution to displace metal impurities, including copper, cadmium, cobalt, nickel and germanium.

Electrolysis

The purified zinc solution is converted into cathode in a modern automated tankhouse. Zinc is deposited on cathodes by passage of electric current between the anode and the cathode immersed in the purified electrolye.

Casting

Cathodes are melted using electric induction furnaces, producing the site's base SHG product. After alloying as required, product zinc is cast into slab or block ingots varying from 25 kilograms to 4,000 kilograms.

In 2001, we built a new multi-purpose alloying facility, which has significantly increased our alloying capacity from 75,000 tonnes per year to 110,000 tonnes per year and improved flexibility of our alloy production. We currently produce 100,000 tonnes of alloy per year. Our facility is able to produce CGG, Eutectic (5% aluminium) and special nickel/zinc alloys. At the same time, our jumbo casting facility was expanded from 130,000 tonnes per year to in excess of 180,000 tonnes per year with the addition of another jumbo block casting unit.

Feedstocks

Since 2000 and the introduction of Century concentrates the number of types of concentrate being roasted has reduced from 25 to 1. This change has not only led to far more stability in all Budel processes but also facilitated the significant reduction in concentrate working capital – particularly at Budel. In addition to concentrate approximately 10% of Budel roaster feed is currently made up of oxide and secondary materials. Budel holds stocks of approximately 10,000 tonnes of zinc concentrate at the site. The remainder of Budel's feedstock requirements are held at Antwerp in Belgium, which has concentrate storage capacity of more than 70,000 tonnes.

We have a letter of intent with a company that produces a high grade zinc concentrate that is rich in silver to compensate a possible shortage of silver in Century zinc concentrate.

Production

Up until 2003 Budel's rated production capacity has been 220,000 tonnes of zinc metal per year and its typical production is 210,000 tonnes per year. Additionally, Budel produces cadmium metal, sulphuric acid, and

Budel Leach Product ("BLP"). During 2004 the Budel cell house capacity has been expanded such that from 2005 rated capacity will be 232,000 tonnes per year of market metal.

Budel has been a virtually solid waste-free zinc smelter following its conversion in 2000 to predominantly low-iron Century concentrates. The conversion of Budel to process Century concentrates enabled the site to comply with the historic environmental commitments made to the Dutch authorities to cease production of solid waste material previously stored on site. A second biological waste water treatment plant commissioned in 1999 has allowed Budel to comply with Dutch effluent quality standards.

The BLP is currently classified as a saleable product as it is sold to secondary European smelters that recover lead and precious metals. Continued classification of BLP as a saleable product is essential to the continued operation of Budel. "Spicing" of concentrate feed with Century lead concentrate and Cannington lead concentrate, which has a high silver content is consistently required to ensure that a saleable BLP is maintained. As Century's lead head grade declines through its mine life, the lead and silver content of Century zinc concentrate will reduce, requiring Budel to make further Cannington lead concentrate additions to maintain BLP classification as a saleable product.

Production Data Budel Smelter

	Historical			Forecast	
	Fiscal Year Ended or Ending 30 June				
	2001	2002	2003	2004	2005
			(tonnes)		
Zinc	215,845	193,566	212,134	226,500	232,199
% of which are alloys	34%	41%	44%	45%	47%
BLP	84,439	72,296	81,363	81,661	85,070
Cadmium	594	419	480	513	551
Copper in cake	602	503	596	609	645
Sulphuric Acid	335,324	269,803	312,336	321,079	324,610

Budel's two key products are SHG and CGG alloy. The Budel smelter also produces high value-added industrial alloys following the commissioning of the new alloying facility, which also gives the flexibility to produce a wide range of alloys and quickly adapt to changing market needs.

By-Products

Budel produces over 320,000 tonnes of high-quality sulphuric acid that is sold to customers located within a 150 kilometres radius of the plant.

We produce approximately 81,000 wet tonnes of Budel Leach Product ("BLP") per year. The material, which is used as a raw material for lead smelters with payable credits for lead and silver, is sold on the basis of long-term contracts. Currently contracts are in place with both European and overseas customers. Zinifex has the potential to earn marginal revenues on BLP sales.

Cadmium metal and copper-cobalt cakes are sold to long-term customers. All internally generated recycle streams including zinc dross are retreated back through the process which enable Budel to maintain zinc recoveries in excess of 98%.

Marketing

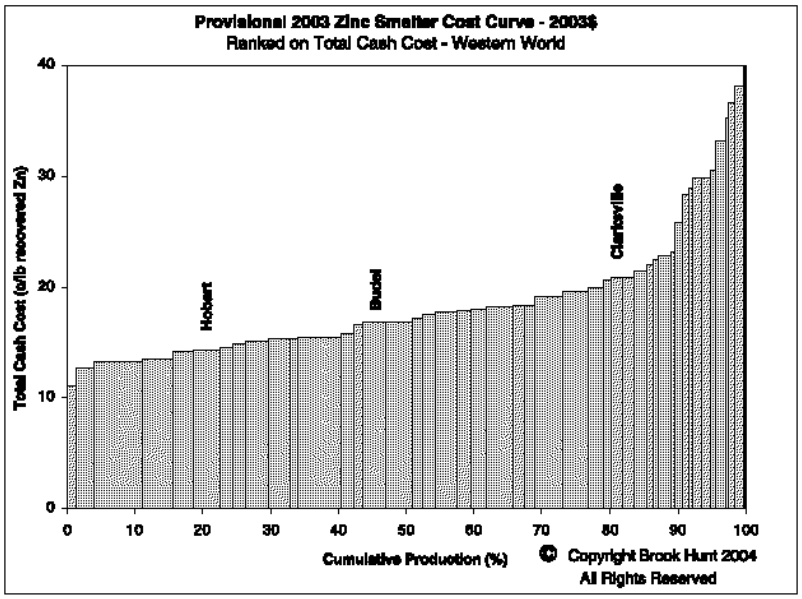
Budel's strategy is to maximise revenue from its existing capacity by focusing on higher-value-added products and moving the product-mix away from commodity-grade metal to specialised alloy products based on customer specifications. As part of this strategy, Budel has expanded its alloying capacity and flexibility through an upgraded alloy facility.

Budel has a dedicated, site-based sales and marketing team. The sales and marketing team operates as a direct interface between the customers and Budel's production department, enabling a quick response to customers' needs. Budel works closely with its customers to ensure its production meets customers' demands, in quality, form and type. Budel sells 18,000 tonnes to a neighbouring rolling mill as molten metal.

Operating Costs

Budel's scale and location advantages are partially offset by the high unit costs in its operations. At provisional 2003 conditions, Budel's median cash cost position on the Western World industry cost curve, is illustrated below in Brook Hunt's 2003 Total Cost Curve analysis.

Brook Hunt 2003 Total Cost Curve (in US cents)



Brook Hunt's 2003 Total Cost Curves are modelled using base US dollar data for 2002 and estimates of 2003 exchange rates, inflation, metal prices and realisation charges. The full effect of exchange rate and inflation fluctuations in each country has been applied. Our operations have been plotted using forecast calendar year 2003 data supplied by us to Brook Hunt.

Total cash costs for each smelter are determined by analysis of the principal cost components, namely labour, net energy, maintenance materials, consumables and other on-site costs. A credit is given for power generated from, or the sale of, steam from waste heat boilers to arrive at the net energy cost. Electricity accounts for 35 to 40% of our operating costs and the price we pay under contract at Budel is linked to the zinc price. Total cash costs for each smelter do not include any capital expenditures or depreciation of earlier capital expenditures.

Services and Infrastructure

Our Budel site has entered into a long-term power contract with Essent Energy Trading B.V. Our current power supply contract runs until mid-2005. Electricity is relatively expensive in The Netherlands due to government policy whereby grid restrictions limit access to power from neighbouring countries where energy is considerably cheaper. Our gas is supplied under a contract with Gasunie.

Logistics

Budel is strategically located close to the ports of Antwerp and Rotterdam, as well as the major industrial centres in The Netherlands, Belgium, the Ruhr area in Germany, Luxemburg and northern France. An efficient rail network provides the major access to site for raw material supply. Finished product transport is mainly by road supplemented by rail and barge transport.

Our Budel site benefits from its central European location with approximately 80% of total product sales delivered to customers within 300 kilometres of the plant.

Management and Employees

As of November 2003, Budel had a skilled and educated workforce of 486 employees. Over the period of 2002 and 2003 our employee turnover at Budel has been low, averaging 4% to 5% per year. Our experienced management team runs Budel as a stand-alone business unit.

We reached an agreement in principle for a new two year collective labour agreement in July 2002. The collective labour agreement governs salary and working conditions for all award employees in the Dutch metals industry.

Our Budel operation had a 12-month rolling average LTIFR of four as at June 2003, and a 12-month average MRIFR of 21 for the same period. The occupational health and safety component of the Budel management system is accredited to OHSAS 18001.

Environmental Management

General

Our Budel operation has ISO 14001 certification for the site environmental management system in addition to ISO 9001:2000 certification for the management system.

When originally commissioned in 1973, our Budel smelter used the jarosite process to remove iron as a solid process waste. Jarosite was disposed of in on-site ponds under the terms of the original site environmental agreements. In 1993, Budel committed to containing and mitigating the impact of the historic residue, and ultimately ceasing the production of jarosite and the related by-product gypsum. The site production of jarosite ceased after the full conversion to Century concentrates in mid 2000.

A key component of Budel's environmental approach is the use of innovative technology for treating waste waters contaminated with low concentrations of heavy metal sulphates using sulphate-reducing bacteria (SRB). In 1992, we built a full-scale SRB plant to treat historical groundwater contamination from the geohydrological containment system. In the late 1990's, the SRB-technology was modified and refined to treat waste waters with higher metal sulphate levels. In 1999, an additional biological plant was added to treat acid plant bleed solutions that had been traditionally neutralised with lime to produce gypsum.

Under a 1993 agreement with Dutch authorities, our site has invested heavily in projects to ensure jarosite and gypsum material stored on-site is contained in appropriate containment cells. The agreement with the Province of Noord-Brabant included completion of capping of the ponds by December 2005 prior to handing over responsibility of the area to the Provincial Authorities. The Agreement also included an obligation to make a financial provision to cover the costs relating to the ongoing maintenance of the ponds after handover (the "After-Care Fund").

Given the historically low zinc price and treatment charges, negotiations have commenced with the relevant Dutch authorities regarding the timing of final handover, a deferred payment schedule, the final amount of the After-Care Fund, including any security arrangements associated with the outstanding balance of funding.

Budel is required to significantly reduce the consumption of ground water, used as process water makeup, by 1 January 2005. In addition to progressing a number of capital projects in 2004 to reduce ground water requirements, Budel is also seeking an extension from the relevant authorities to the 1 January 2005 deadline.

Material Environmental Issues

For more information regarding the methodology which the Company has adopted to identify material environmental issues and estimate their rectification or remediation costs, you should read the first two paragraphs of "Business– Century Mine – Environmental Management – Material Environmental Issues" and read this summary in conjunction with those paragraphs, Annex D to this Institutional Offering Memorandum and Note 12 to the Pro Forma Historical Financial Information. A summary of our conclusions regarding material issues is outlined below. This summary of material environmental issues must be read in conjunction with the limitations and qualifications summarised in Annex D to this Institutional Offering Memorandum.

After-Care Fund Commitment. Waste ponds exist on site containing gypsum and jarosite. Responsibility, in perpetuity, for the ongoing management of the ponds will be taken over by the Province Noord-Brabant after their final closure. An After-Care Fund will be required to pay for this long-term management. An initial payment of €18 million prior to handover was agreed with the Province, of which €9 million is still outstanding and scheduled to be paid in progressive instalments by December 2005, however negotiations are underway to extend the payment schedule to fiscal year 2009. The Province is yet to agree to any modification of the payment schedule. We have assumed a 50% likelihood of the Province agreeing to extend the payment schedule to fiscal year 2009, with the alternative being that payments would need to be made by December 2005, as originally agreed. We have also assumed that if the Province agrees to an extension, payment activities will continue for five years to fiscal year 2009.

After-Care Fund – Final Payment. The final value and timing of the After-Care Fund payment is yet to be agreed with the Province, depending on technical and financial modelling outcomes. This could result in the requirement to pay funds in addition to the initial €18 million referred to in the previous paragraph. While we believe that no additional funds should be paid, formal documentation from the Province indicates that the total amount payable is €36 million (i.e., additional funds of €18 million). We have assumed a 90% likelihood that some form of additional payment will be required. Cost estimates for additional payments have been modelled as a distribution, with an estimated most likely additional cost of around €5 million, and an estimated 5% likelihood that the cost will be greater than €15 million. We have assumed that the additional payment activities, if required, will commence in fiscal year 2006 and continue for 3 years to fiscal year 2009.

Irrespective of the outcome, we may be required to guarantee any unpaid portion of the After-Care Fund, which could be as much as the €18 million difference between the initial interim agreed amount of €18 million and the €36 million funding requirement originally set by the Provincial Authorities. If required, the guarantee would remain in place during the period of additional payment activities. We believe it is possible that the Provincial Authorities may accept Budel's land holdings as security for the unpaid portion of the After-Care Fund.

Gypsum Pond Closure. The capping of gypsum pond WWN2 was originally scheduled for completion by the end of 2005, however the site is currently negotiating for an extension to the capping date to December 2009. The site is proposing to shift remaining contaminated materials (clarification pond sludge and zinc ashes) into the gypsum pond before the end of fiscal year 2004 and complete the final capping by the end of fiscal year 2009. It is not known whether this approach will be acceptable to the Province. URS's modelling is based on 100% likelihood that the capping will be required, with a 50% likelihood that the site's proposed capping schedule (by the end of fiscal year 2009) will be accepted, and 50% likelihood that the site will have to comply with the original schedule (by the end of fiscal year 2005).

Greenhouse Gas Emission Mitigation. General commitments to reduce greenhouse gas emissions at government, industry and community level may lead to increased electricity tariffs. Electricity supply is

contracted until June 2005, but increased prices are possible after that date due to the introduction of such things as an "ecotax". We have assumed that, in the event of such taxes, additional electricity costs will commence in fiscal year 2006 and this has been modelled as continuing for 12 years to fiscal year 2018. Further, we have assumed a 70% likelihood of increased tariffs.

Wash Tower Sludge Disposal. The site has a stockpile of 750 tonnes of wash tower sludge, containing mercury and selenium, which requires disposal. Previous disposal was to German salt mines, but as of 2001 this practice was ceased due to changes in the Dutch regulatory requirements. We believe the site may be able to obtain a licence to export the material to Germany, however if the site cannot obtain a licence to export, then it will have to identify new disposal/treatment options. We have assumed that disposal activities will commence in fiscal year 2004 and will be an ongoing cost. These costs were modelled for 14 years to fiscal year 2018. We have assumed a 90% likelihood that the material will be able to be exported to Germany, with a 10% likelihood that it will be required to be disposed elsewhere.

Other Issues. Our review also assessed the risk and potential impact of the following issues at Budel as being material, but concluded that at the 80% confidence level utilised for planning purposes, the NPV discounted forecast financial impact was less than A$1 million. These risks were related to IBC Management and a cadmium metal ban. Any change to the assumptions used to evaluate these particular risks, such as confidence level, estimated cost, timing or likelihood of occurrence could however increase this estimated financial impact.

Capital Expenditure Profile

Budel's plant is well maintained. A campaign shut down for mid-calendar 2004 will cost approximately €3.6 million. In the longer term, campaign shutdowns are planned at five year intervals, with expected capital costs of about €6.0 million each.

Capital Expenditure Profile

	Historical	Forecast	
	Fiscal Year Ended or Ending 30 June		
	2003	2004	2005
		(€ millions)	
Compliance			
Health & Safety	0.2	0.4	0.4
Environment	0.0	0.0	0.0
Sustaining			
Asset Maintenance	2.4	3.0	4.0
Maintenance Shutdowns	0.0	1.6	2.0
Growth			
Commercial	—	0.2	5.6
Total	2.6	5.2	12.0

Note: Budel also spent €5.7 million in 2003 and estimates that it will spend €5.7 million and €2.3 million in fiscal years 2004 and 2005, respectively, on environmental commitments relating to pond capping and "aftercare".

Opportunities for Growth

Production Expansion

We are planning to expand Budel's existing capacity to 260,000 tonnes per year in fiscal year 2006 with modest levels of capital investment and minimal changes to existing infrastructure. This expansion involves a number of de-bottlenecking projects in each area of the plant. €9.3 million (A$15.5 million) expenditure has been

allocated for the de-bottlenecking project. The estimated cost of the capacity increase at US$340 per tonne of zinc metal is substantially below the industry benchmark for the cost of capacity increases.

Increased EZDA Production

Diecast alloys have the highest premia of large-volume zinc products. The diecast market is anticipated by us to grow by 2% per year over the next 10 years. Budel currently has no market share for EZDA products. Budel plans to enter the EZDA market with gradual growth to seek to develop market position in Western Europe.

Asset Realisation - Land

Budel possesses significant land holdings adjacent to the smelting facility. In particular, two land portions can potentially be sold, comprising 450 hectares of nature reserve and 110 hectares of industrial land, the latter known as the DIC Industrial Park. Developable land for industrial enterprises is in short supply in that part of The Netherlands. Therefore, we expect that sufficient demand for such land will exist and that the regulatory authorities would support such a development. A preliminary environmental impact study is being prepared to facilitate a sale that we currently forecast to start in the period between 2006 and 2007.

We have valued this property at €14.5 million. However, we believe that figure may be conservative since it is based on a progressive sale over many years rather than a sale of the entire parcel in the near future.

Port Pirie

Background

Our Port Pirie smelter is located on the eastern side of the Spencer Gulf in South Australia, approximately 200 kilometres north of Adelaide. Port Pirie is the nearest sea port to Broken Hill, located 410 kilometres from the Broken Hill mine by rail. Our Port Pirie Smelter was originally developed for smelting Broken Hill lead concentrates.

Port Pirie is an integrated multi-metal smelter and refinery with flexibility to efficiently process a wide range of lead-dominant feedstocks to produce refined lead, silver, zinc, copper and gold. Port Pirie also leases and operates a committed port facility.

Asset Strategy

Port Pirie is the world's largest primary lead smelting facility, which allows it to generate significant economies of scale. Port Pirie's competitive position is enhanced by its ability to produce a range of metals and treat a variety of by-products, together with its focus on supplying the growing markets of Asia. Port Pirie is strategically linked to the Hobart smelter through by-product flows and to Rosebery and Century by lead concentrate sourcing.

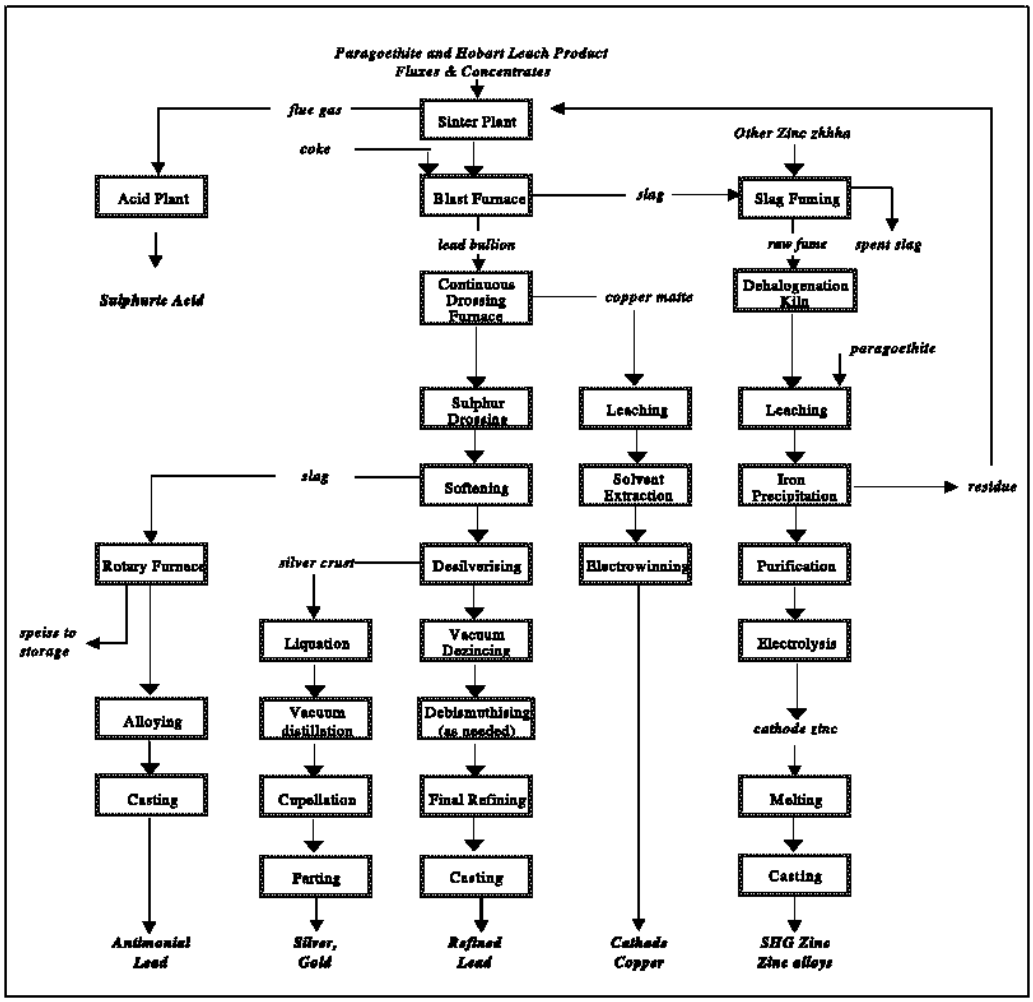
Port Pirie's strategy seeks to build on its scale and product flexibility, while continuing to meet the cost of sustaining its process plant and infrastructure. Some of the significant elements of our strategy are to:

- establish profitable supply partnerships on export commodity products;
- diversify our concentrate supply sources beyond the life of Broken Hill and Endeavour mines;
- expand our multi-metal capability to increase production of high value metals;
- seek sustainable reductions in working capital and operating costs, especially power prices;
- derive additional metal value through the accelerated treatment of Hobart's and Port Pirie's by-product stockpiles; and
- complete the restoration of our process plant and infrastructure, utilising capital efficient techniques.

Operations and Process Description

Our Port Pirie operation incorporates a lead smelter and refinery, a copper plant and a zinc plant. A general flowsheet of our Port Pirie operations is shown below.

General Flowsheet



Lead Operations

The lead smelting operations consist of an updraft sintering machine, blast furnace and pyro-metallurgical refinery.

The sintering process involves roasting lead sulphide to produce a lead oxide sinter cake, which is then crushed to a suitable size product for the blast furnace. The roasting process gives off sulphur rich gases, which are sent to the acid plant, and low sulphur gases that are discharged to a 205 metre high stack.

The Port Pirie blast furnace is the world's largest lead blast furnace and operates with a feed of high quality sinter and coke. The process involves reducing the sinter feed with coke to produce a lead bullion and a zinc rich slag. Lead bullion and slag are continuously tapped from the furnace, separated in the fore-hearth and transported in ladles for lead refining and slag fuming. Slag may also be granulated with water and stockpiled for later processing.

The lead refinery was rebuilt and modernised in 1998 to replace older, higher cost operations. Refinery capacity is well in excess of the capacity of the blast furnace.

De-copperised bullion is processed through various refining stages using a series of batch treatments in large vessels. The precious metals silver and gold are removed and further refined to produce silver and gold bullion. The other residual impurities, including arsenic, antimony, zinc and bismuth are removed to produce refined lead bullion that is cast into blocks using modern, efficient casting equipment. A wide range of enhanced lead alloys is also produced.

Zinc Operations

The zinc operations recover residual zinc from lead blast furnace slags using pyro-, hydro- and electro-metallurgical stages. Two slag fuming furnaces are filled with ladles of molten slag from the blast furnace and cold slag from the stockpile. Other oxidised zinc feeds, including zinc silicate ore from our Beltana mine stockpiles and zinc-containing materials such as electric arc furnace dust and zinc dross, are also charged as a slag mix having 18% to 23% zinc. Fuming furnace gases are cooled through a boiler and other heat exchangers before zinc oxide is finally collected in a bag house.

Collected fume is roasted in rotary kilns to remove halides before grinding and transfer to the electrolytic zinc plant for further purification. Zinc oxide fume is batch leached with spent electrolyte and added iron. The resulting solution is batch purified with zinc dust and the purified solution sent to electrolysis. Cathode zinc produced at a tank-house is then melted in electric induction furnaces and cast into blocks or slabs. A separate furnace is used for alloy production.

Copper Operations

Copper matte from the drossing of lead bullion is leached with oxygen at atmospheric pressure in a solution of sulphuric and hydrochloric acid. Copper is extracted from the leach solution and transferred using solvent extraction into a sulphate solution for electrowinning. Cathode copper is produced at near LME A grade quality.

Feedstocks

Historically, the majority of Port Pirie's concentrate requirements have been sourced from Broken Hill (owned and controlled by Perilya) and Endeavour (owned and controlled by Consolidated Broken Hill). Reduced availability of Broken Hill concentrates in recent years has led to an increase in supply from other sources, most notably Cannington, Rosebery and Century. Our Port Pirie smelter now treats all of Rosebery's lead concentrate and a significant proportion of Century's lead concentrate. We have long-term supply agreements in place with the smelter's major third-party suppliers, Broken Hill, Endeavour and Cannington. Recently, Perilya exercised its right to terminate our long-term supply agreement for Broken Hill concentrates. Our current agreement with Perilya will terminate in December 2005. Discussions regarding supply arrangements for Broken Hill lead concentrates beyond 2005 will be held with Perilya during 2004. With the exception of our agreement with Perilya, which covers only about 30% of our feedstock demand, our concentrate feed mix will be relatively stable for the next six to eight years.

Lead Concentrate Feed

	Historical			Forecast	
	Fiscal Year Ended or Ending 30 June				
	2001	2002	2003	2004	2005
	(tonnes in thousands)				
Century	4.2	65.7	79.7	71.1	56.2
Rosebery	29.4	38.1	36.5	44.1	41.9
Endeavour	56.4	69.9	71.1	74.0	70.9
Broken Hill	114.9	85.6	70.1	87.2	91.5
Cannington	61.2	65.8	60.8	62.2	68.9
Lennard Shelf	4.1	10.2	—	—	—
Pinnacle Concentrate	—	0.9	1.3	0.9	1.0
Other South American	—	8.0	22.9	3.2	—
Total	270.2	344.2	342.4	342.9	330.3

Port Pirie also processes approximately 8,000 tonnes per year of zinc ore from stockpiles from our Beltana and Aroona mines, both of which are now closed.

Currently, Port Pirie sources 25% of its feedstock from its own or Hobart by-products. The typical consumption of by-products is provided in the table below.

Tonnes per annum (forecast fiscal year 2005)	Produced by Hobart	Drawn ex Stockpiles	Sent to Stockpile	Processed by Port Pirie
Hobart Sourced				
- Paragoethite	110,000	—	32,000	78,000
- HLP1	—	27,000	—	27,000
Port Pirie Sourced				
- High zinc slag	—	5,000	—	5,000
Total	110,000	32,000	32,000	110,000

Note: Paragoethite and HLP1 contain approximately 17% and 18% zinc, respectively.

Presently, Port Pirie is processing just over 65% of the paragoethite transported from Hobart, with the remainder being stockpiled on site at Port Pirie. Hobart's switch to an increasing proportion of Century concentrates will significantly reduce its production of paragoethite. This in turn will enable Port Pirie to reduce and ultimately eliminate its paragoethite stockpiles and increase its capacity to treat the higher value HLP1. The elimination of these paragoethite stockpiles by 2020 is a condition of Port Pirie's Environmental Protection Agency licence. At the end of 2003, we had a stockpile of 240,000 tonnes of paragoethite.

Production

Our Port Pirie smelter had a production capacity of approximately 270,000 tonnes per year of lead metal and lead alloys, prior to the closure of Cockle Creek smelter in 2003. Our Port Pirie smelter was originally built in 1889 with capacity of 80,000 tonnes per year and was progressively expanded in the 1950s and 1960s. Currently lead blast furnace capacity limits annual production to approximately 245,000 tonnes. The lead refinery, in which gold and silver are recovered, was largely rebuilt in 1998. The current zinc production facilities were commissioned in 1967 and have a capacity of 44,000 tonnes per year of zinc SHG and zinc alloys. Copper production facilities were commissioned in 1984 and have a capacity of 4,300 tonnes per year of copper cathode.

In 2001, our site embarked upon a significant business improvement process focused on production costs that has resulted in production levels of the various metals increasing by approximately 20%, which was

maintained through fiscal years 2002 and 2003. We achieved this result with minimal capital expenditures. This programme is ongoing and continues to maximise production within feedstock constraints, net of the production decrease in fiscal year 2004 arising from the loss of lead bullion feed from the Cockle Creek smelter following its closure.

During fiscal year 2002, we were able to increase our lead production by approximately 27% to 274,000 tonnes per year, our highest level of production ever, by improving plant availability and productivity. During fiscal year 2003, our zinc production of 43,000 tonnes was our highest since 1974, and our silver and gold production was the highest ever.

The table below sets out our production for our past three fiscal years and our forecasts for fiscal years 2004 and 2005.

Production Data for Port Pirie Smelter

	Historical			Forecast	
	Fiscal Year Ended or Ending 30 June				
	2001	2002	2003	2004	2005
	(tonnes in thousands)				
Lead metal	187.1	240.9	233.2	225.9	220.4
Lead alloys	28.1	33.2	34.3	18.7	5.7
Zinc Special High Grade	26.7	22.5	20.5	32.2	38.4
Zinc alloys	5.4	18.1	22.5	8.8	3.0
Silver (tonnes)	364.3	431.0	461.6	408.9	424.9
Gold (thousands troy ounces)	22.5	25.8	26.8	20.9	19.5
Copper cathode	3.8	3.7	3.7	4.1	4.1
Sulphuric acid	82.3	90.2	98.3	95.1	96.9

Our forecast decline in lead production between fiscal years 2003 and 2005 is expected to arise from the loss of quenched lead bullion from the Cockle Creek smelter following its closure in 2003. The forecast reduction in zinc production in fiscal years 2004 and 2005 is due to repair work, which is expected to temporarily affect plant availability. Our acid production has increased over recent years due to improvements in sinter plant utilisation.

Port Pirie produces approximately 95,000 tonnes per year of sulphuric acid, which is sold to a global acid marketing company under a long-term contract.

Approximately 3,700 tonnes of copper cathode is produced each year and sold to a range of customers.

Marketing

Port Pirie lead is a well known, respected and quality lead brand. Approximately 80% of the smelter's lead product is exported and it is a major supplier of lead metal to battery and chemical companies in North and South East Asia. Silver is sold throughout Asia, while small quantities of copper cathode and gold are also important contributors to overall revenue.

Port Pirie has introduced a Hi-Bismuth battery lead that significantly improves performance of the new era valve regulated lead-acid batteries ("VRLA"). VRLA batteries, which are 36 volt, represent a growing market because they require lower maintenance compared with traditional batteries.

Marketing of Port Pirie's Asian exported commodity lead has recently changed through a long-term sales arrangement with global metal trading house, Trafigura B.V. Currently, we sell approximately 190,000 tonnes of commodity grade lead and 16,000 tonnes of zinc under this agreement annually. The terms of this agreement have enabled us to reduce our payment terms to one week, eliminate our Asian warehouses (and associated inventories) and increase our margins.

As a result of entering into the Trafigura agreement, we intend to sell approximately 65% of our Port Pirie zinc production as SHG for the Australian market. A further 28% is to be sold as SHG for export, while the remaining 7% is expected to be exported as zinc alloy to customers located in Malaysia, the Philippines, Saudi Arabia and Taiwan.

Operating Costs

Port Pirie is among the lowest cost lead producers in the world, primarily due to its scale advantage of being the world's largest lead smelter, complemented by credits from by-products. Its feedstock sources are in relatively close proximity to the smelter, which assists in reducing freight costs. Furthermore, our recent agreement with Trafigura B.V will enable us to avoid the typically high historical freight costs to Asian markets which we faced in prior years.

Although Port Pirie produces only small amounts of zinc relative to other group smelters, the fact that its feed stock is essentially by-product from Hobart means that its raw material costs are very low. This mitigates the higher per unit cost Port Pirie faces by virtue of the small size of its zinc plant.

Services

AGL provides electricity to the zinc plant, while Origin Energy provides electricity to the lead plant. Origin Energy also supplies gas to the zinc and lead plants at Port Pirie. AGL previously supplied electricity to the lead plant. Water is supplied to both the lead and zinc plants by SA Water.

Transport

Port Pirie leases and operates the adjacent port facility from the Flinders Ports Corporation under a long-term arrangement. It operates a concentrate and residue unloading facility as well as the finished metal product and acid loading facility. The Company subleases concentrate loading facilities and a storage shed to Perilya who operate these facilities. Concentrates are received at Port Pirie by rail (from Broken Hill and Endeavour) and by ship through the port.

While a significant proportion of final metal product is shipped from the adjacent port facilities, approximately half of the tonnage is shipped from the Port of Adelaide, 200 kilometres south of Port Pirie. These transport arrangements will be modified as the Trafigura supply is fully implemented.

Management and Employees

Port Pirie has a stable and committed local workforce, and has a solid industrial relations climate. At the end of January 2004 there were 703 direct employees and 115 contractors. There is a current enterprise agreement in place, which is valid until 30 November 2004. That agreement is based on a performance-based payment regime. Employee turnover during the last three years averaged approximately 7%.

The twelve month rolling average for MRIFR remained static at 45 from June 2002 to June 2003. An improvement was not recorded for the twelve month rolling average LTIFR increasing from 4 in June 2002 to 10 in June 2003.

Each employee is monitored for lead in blood levels and there are strict controls in place once certain trigger points are activated. These trigger points are lower than those required by the applicable legislation. During 2003, the average number of Port Pirie employees and contractors above the Company's lower lead in blood limit of 30 micrograms per decilitre was 179.

Environmental Management

General

Port Pirie has a licence to operate under the South Australian Environment Protection Act. The licence includes an Environmental Improvement Plan ("EIP") and an Environmental Management & Monitoring Plan.

Port Pirie works closely with and supports the local Environmental Health Centre ("EHC") to minimise potential health impacts of metals in Port Pirie. The Port Pirie works also cover the cost of community lead in blood and soils testing. The South Australian Government currently funds the EHC's main operating activities. There has been a progressive decrease in community lead in blood levels, with average levels among children now less than half what they were in the mid-1980s. However over 50% of the Port Pirie children in the testing programme still exceed the National goal of 10µg/dl.

Dealing with on-site stockpiles of by-products and wastes is an important priority for the smelter, of which paragoethite generated at Hobart is the most significant volume. As the proportion of Century feed to Hobart increases over the coming years, the production of paragoethite at Hobart will decline. This will allow Port Pirie to allocate more capacity to treating, and ultimately eliminating the paragoethite and other by-product stockpiles. Port Pirie currently has a licence to store 350,000 tonnes of paragoethite with the condition that this material must be reduced to zero by 2020.

The site recently completed significant elements of a Water Management Plan EIP at a cost of over A$40 million, including process modifications and installation of a Process Effluent Treatment system and sewage treatment plant. Although site waste water does not meet all of the South Australia Water Quality Policy criteria, the SA EPA licence has recently been issued with licence limits that reflect the capability of the water treatment system with improvements implemented to date.

Material Environmental Issues.

For more information regarding the methodology which the Company has adopted to identify material environmental issues and estimate their rectification or remediation costs, you should read the first two paragraphs of "Business– Century Mine – Environmental Management – Material Environmental Issues" and read this summary in conjunction with those paragraphs, Annex D and Note 12 to the Pro Forma Historical Financial Information. A summary of our conclusions regarding material issues is outlined below. This summary of material environmental issues must be read in conjunction with the limitations and qualifications summarised in Annex D to this Institutional Offering Memorandum.

On-site Soil and Groundwater Remediation. Soil and groundwater contamination exists at Port Pirie from over 100 years of industrial operations. The costs of ongoing storage of contaminated soil (including excavation and disposal to an on-site repository), and ongoing treatment of intercepted contaminated groundwater for 40 years post closure have been modelled. We have assumed a 100% likelihood of remediation activities commencing at plant closure, which is assumed to be in sixty years time.

Metal in Grain. Elevated levels of lead and cadmium have been found in wheat and barley grown on farms near Port Pirie. Some lead levels in grain have exceeded new food quality standards. Possible sources of contamination and rectification measures are currently being assessed. Blending of grain is a potential option for managing the issue. We have assumed that management activities may be required any time between fiscal year 2006 and fiscal year 2018.

Fugitive Lead Emission Reduction. This issue relates to fugitive emissions of lead and other heavy metals. There is a general site fugitive emission reduction program. Major sources include the Sinter Plant, the Blast Furnace and the Slag Fumer and Kiln area. The initial area of work was the blast furnace fume capture and slag fuming furnace charge and port fume capture. Current activities are being focused towards the kilns and general slag fumer. Other areas for future improvements include the sinter plant and the blast furnace. Reduction activities are underway and we have assumed that they will continue for 14 years to fiscal year 2018. Further, we have assumed a 100% likelihood of the occurrence.

SOx Emission Reduction. Sulphur dioxide levels occasionally exceed the National Environmental Protection Measure ("NEPM") one hour standard in the local community, but are not in breach of our licence. The driver for improvement in SOx emissions is compliance with NEPM related SA EPA requirements by fiscal

year 2008 as well as some community concern. Investigations into all options for reduction and management commenced in fiscal year 2004.

The probabilistic modelling is based on implementation of a predictive SO2 modelling system over the period from fiscal year 2004 to fiscal year 2008, and a 90% likelihood that either an acid plant or salt water scrubber will be required between fiscal years 2009 and 2018. At the present time and in light of the current state of investigations into these options, we have assumed that these two options are equally likely.

Arsenic Speiss Containment. Arsenic speiss is produced on the site and approximately 6000 cubic metres are stored on a concrete pad. The arsenic speiss stockpile is mostly covered but stormwater can run off and enter groundwater. Annual production is in part determined by the treatment rate of paragoethite. There is no long-term use for this material. The government will not allow continued on-site disposal and the site is currently investigating offsite options to a commercial landfill. Disposal activities will commence in fiscal year 2004, and we have assumed that disposal will continue for 14 years to fiscal year 2018. We have assumed a 100% likelihood that disposal will be required.

Calcium Arsenite Storage. Two areas exist for storage of calcium arsenite on site. One has been rehabilitated. However, 22,000 cubic metres of calcium arsenite is stored in two water ponds on site that are lined but not rehabilitated. The government may require excavation and removal of this material to a secure landfill. Opportunities to excavate, reprocess and dispose are subject to further investigation. We have assumed that disposal activities will occur between 2013 and fiscal year 2018. Further, we have assumed a 100% likelihood that disposal activities will be required.

Surface Water Discharge Treatment. There is an SA EPA approved Waste Water Management Plan which has been substantially implemented. However, site waste water discharges still exceed some water quality policy criteria. At present, Port Pirie is required to submit a proposal to move towards compliance, which will include diversion of some flows to the treatment plant in the shorter term and may include segregation of cooling water and treatment of stormwater in the longer term. Further improvement activities will commence in 2004, and we have assumed that various costs could arise in the period to fiscal year 2018. Further, we have assumed a 30% likelihood that compliance with Water Quality Policy criteria would be required and that there is also a 5 to 10% likelihood that a filtration and ammonia removal system will be required. A 100% likelihood of implementing various improvements over the next five years has also been assumed.

Ground Water Protection. There is contaminated groundwater associated with the site that will require management, including identification and management of sources, installation of an intermediates storage shed with impermeable base and ongoing groundwater work. Management activities will commence in fiscal year 2005 and are assumed by us to continue for 13 years to fiscal year 2018. Further, we have assumed a likelihood of 100% for these costs.

Other Issues. Our review also assessed the risk and potential impact of the following issues at Port Pirie as being material, but concluded that at the 80% confidence level utilised for planning purposes, the NPV discounted forecast financial impact was less than A$1 million. These risks were related to off site contamination in dust and soils, community blood lead levels, greenhouse issues, and off site slag. The metal in grain risk is being mitigated by the item fugitive air emission reduction described above. Any change to the assumptions used to evaluate these particular risks, such as confidence level, estimated cost, timing or likelihood of occurrence could, however, increase this estimated financial impact.

Representative Class Action

Representative proceedings claiming property damage, diminution of property value and personal injury allegedly due to exposure to lead from the operation of the Port Pirie smelter were instituted against Pasminco Port Pirie Smelter Pty Ltd., a company we are acquiring from Pasminco Limited in the restructuring to form part of the Zinifex group. These proceedings were dismissed on procedural grounds. The release provisions of the

deeds of company arrangement are intended to and on their face apply such that the Deed Companies acquired by Zinifex from Pasminco Limited will be released from most pre-VA claims. Pasminco Port Pirie Smelter Pty Ltd is a Deed Company. For a discussion of the release of Pre-VA Claims, see "Voluntary Administration and Restructuring of Pasminco Limited". If any such claims, or claims based on similar circumstances, are brought against us and are successful, the outcome could adversely affect us.

Capital Expenditure Profile

Port Pirie's plant is a mixture of older and newer facilities. Capital expenditure constraints in recent years have meant that older areas of the plant now require a specific focus, which is reflected in the increased expenditure planned from fiscal year 2005, to ensure ongoing efficient operation in compliance with regulatory requirements. The major areas of focus for a programme of structural improvements are the Blast Furnace Telpher, Zinc Electrolysis Cell Floor and Sinter Plant Structures. These projects are planned for progressive completion over the next two fiscal years until fiscal year 2006 and are provided for in our future capital expenditure plans.

In order to maintain the Port Pirie plant, periodic campaign shutdowns are planned. These shutdowns primarily involve the blast furnace, which has a 2-year cycle, and slag fuming boilers, which have an 18 month cycle.

Our capital expenditure plan for our Port Pirie smelter through fiscal year 2005 is provided in the table below.

Port Pirie Capital Expenditure Plan

	Historical	Forecast	
	Fiscal Year Ended or Ending 30 June		
	2003	2004	2005
	(A$ millions)		
Compliance			
Health & Safety	0.9	2.3	2.8
Environment	2.8	2.9	6.0
Sustaining			
Asset Maintenance	3.3	7.8	13.0
Maintenance Shutdowns	4.0	2.4	6.1
Growth			
Commercial	2.2	0.2	3.5
Total	13.2	15.6	31.4

As the proportion of Century zinc concentrate feed to Hobart increases, we expect the germanium level in paragoethite to rise and, when processed at Port Pirie, to be contained in zinc fume. Additional iron precipitation facilities may be required to lower the germanium content before the zinc electrowinning process. If required, we estimate the capital cost of the project will be approximately A$14 million, of which A$3.5 million is assumed to be incurred in fiscal year 2005.

Port Pirie is currently evaluating a project to use the full capacity of the zinc fuming plant, which is higher than Port Pirie's capacity to turn it into metal on site. This additional fume (zinc oxide) could be shipped to our Hobart smelter and would increase Hobart's zinc production by an equivalent amount. It is expected that Hobart will add this fume directly to its roasters. In addition to further processing, this fume could be a useful cooling agent to help maximise roaster capacity. Alternatively, Port Pirie may also provide a valuable oxide feed-stream to Budel and Clarksville to support any increases in capacity at these sites.

Clarksville

Background

Our Clarksville refinery is located Southwest of Clarksville, Tennessee, across the Cumberland River and four kilometres outside the Clarksville town boundaries. We own over 1,400 acres of freehold land adjoining the Cumberland River, of which 120 acres is occupied by the plant and the auxiliary operations. The land surrounding the plant supports farming, forestry and wetlands.

Clarksville is one of the newest most modern smelters in the world. Commissioned in 1978 by Union Miniere SA, it produces around 30% of America's total domestic zinc output. It produces quality metals above LME standards with an established reputation as a supplier of quality zinc products. Its primary products are continuous galvanizing grade and SHG zinc, as well as by-products including cadmium and sulphuric acid.

Clarksville is ideally located to access a large portion of the U.S. zinc market, being situated within 800 kilometres of Chicago, Detroit and much of the United States' industrial heartland. The site lies within one day delivery distance of many of the major U.S. zinc consumers. This provides it with a geographic competitive advantage that contributes to its realisation of a premium over the LME price for its zinc products.

Historically, our Clarksville smelter was heavily reliant on our nearby Gordonsville and Clinch Valley mines for a majority of its feed. As a result of the closing of Gordonsville in 2003 an the scheduled closing of Clinch Valley in 2004, Clarksville now obtains all of its concentrates from other sources.

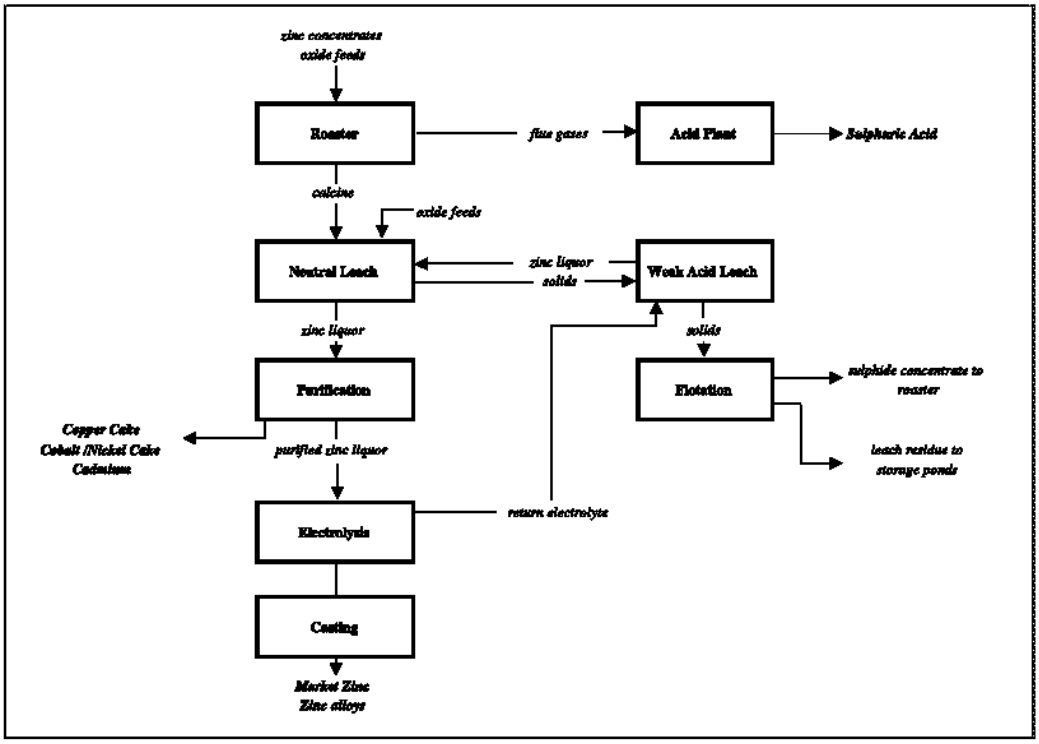
Asset Strategy

Clarksville is a medium scale smelter with limited linkages to the Zinifex group. Our strategy focuses on building on Clarksville's current competitive strengths. Key aspects of our strategy include:

- expanding our capacity by an additional 36,000 tonnes per year, thereby further leveraging Clarksville's strong infrastructure and reducing our cash cost per unit;
- positioning ourselves to meet anticipated increased demand for our products which we expect will be generated by a recovery in the U.S. economy;
- Entering selected U.S. zinc alloy markets to increase our proportion of premium margin products sold; and
- securing medium term concentrate supplies and shortening our current concentrate supply chain.

Operations and Process Description

A general flowsheet of our Clarksville operations are shown below.



Roasting and Acid plant

The concentrates are initially combined with "ground dross", the scum that forms on the surface of molten metal, and then roasted. This process oxidises the sulphide concentrates and converts them into zinc oxide calcine. Sulphur dioxide, in the form of gas, is released in the process. The sulphur dioxide gas is captured and converted into sulphuric acid in a separate acid plant.

Production at Clarksville is currently limited by roaster capacity. In order to utilise the spare capacity of the later stages of production, Clarksville purchases oxides that do not require roasting. These materials do not take up roaster capacity, allowing greater zinc production to be achieved.

Primary oxides are sourced from the United States, Mexico and Europe. Some oxides are process by-products or drosses. Other oxides are recovered through the processing of electric arc furnace steel-making dusts. Primary oxide supply will be integral to the plans to increase Clarksville's capacity and may impact the projects' economic viability.

Leaching

During the leaching process, the zinc oxide calcine is gradually dissolved in an electrolyte solution. The remaining leached product is extensively washed and floated to remove unroasted sulphides, which do not dissolve. These zinc-rich sulphides are recycled to the roaster for retreatment.

Zinc dust is used to assist in the removal of other metals present in the solution, such as cobalt and cadmium. Cadmium removed from the solution during this process is further processed in a separate cadmium plant for the production of high grade 99.99% cadmium.

Electrolysis

Finally, the purified zinc solution is subjected to electrowinning, which causes pure zinc to attach to the aluminium cathode. The cell-house has 208 cells and each cell has 48 cathodes with an effective area of 2.6 square metres per aluminium cathode. Anodes are of a standard lead-silver alloy. Clarksville's power consumption is consistent with leading practice in the industry at around 3150 kWh per tonne cathode.

Melting and Casting

The cathode zinc is then stripped from the cathodes, melted in a furnace and cast into SHG zinc. A continuous alloying furnace is interposed between the furnace and the casting machine, allowing the production of various alloys in slab or jumbo standard shapes. A separate scrap furnace allows for the recovery of zinc scraps.

Zinc recovery from concentrate to market metal is approximately 92%, based on the concentrate availability in calendar years 2004 to 2005. Additional zinc recovered through the effluent treatment plant increases our overall zinc recovery by about 1,700 tonnes per year or 1%.

Other Facilities

A zinc dust production unit with three crucibles produces zinc dust by air atomisation for the zinc and cadmium purification operations. This unit has spare capacity, and so the potential exists for further revenue generation by selling zinc dust.

Feedstocks

The Clarksville refinery was specifically designed to recover zinc from the high zinc content low impurity Tennessee (Mississippi) Valley zinc concentrates. As a result of the closing of Gordonsville in 2003 and the scheduled closing of Clinch Valley in 2004, Clarksville steadily increased its proportion of mid range iron concentrates from other sources. In fiscal year 2004, Clarksville expects to source only 6% of its concentrate feedstock from Clinch Valley, with the balance imported from Australia, Ireland and Central and South America.

Historically, the high grade of the Tennessee Valley concentrates allowed Clarksville to achieve recoveries of 97% to 98.5%, although using alternate concentrates as feedstock may reduce this to approximately 92%. As a result of the closing of Gordonsville and Clinch Valley mines, production has been maintained using alternate concentrates as feedstock.

The close proximity of Gordonsville and Clinch Valley to Clarksville resulted in low concentrate transportation costs, minimising Clarksville's cash cost per tonne of zinc. However, in future years, Clarksville expects that low iron and high zinc South American concentrates will be the most likely feedstock and, as such may lead to increased freight costs.

Production

Zinc production in fiscal year 2003 was over 110,000 tonnes, of which some 60% was SHG and most of the balance sold as CGG alloy. In future years, we are planning to enter selected premium value alloy markets to increase our site's product margin mix.

Improved roaster utilisation has allowed production to increase, which we believe should enable Clarksville to surpass its 2001 production of 118,000 tonnes, in the future. The table below sets out our production history for Clarksville for the past three fiscal years and our forecasts for fiscal years 2004 and 2005.

Market Production Data Clarksville Refinery

	Historical			Forecast	
	Fiscal Year Ended or Ending 30 June				
	2001	2002	2003	2004	2005
			(tonnes)		
Zinc	118,188	112,200	110,249	108,287	115,562
Cadmium	376	392	297	399	399
Germanium	19.2	28.1	13.8	—	—
Sulphuric Acid	145,511	144,707	145,862	152,263	159,740

We believe an expansion for Clarksville could be achieved in three stages, yielding a total of an additional 36,000 tonnes of zinc metal production and increasing annual capacity to 154,000 tonnes.

Phase 1 of the production increase would involve maximising the roaster throughput, subject to the existing cell house constraints. This would increase smelter capacity to 130,000 tonnes per year and would cost approximately US$1.5 million. This amount is planned for fiscal year 2006. The additional raw materials would be a mixture of concentrates and oxides to maximise the capacity of the roaster.

Subsequent capacity expansions to 143,000 tonnes per year and then 154,000 tonnes per year would be made possible through addressing existing cell house constraints. These potential capacity additions are not included in our present capital plans.

Our refinery also produces approximately 145,000 tonne per year of sulphuric acid, which is marketed by Zinifex Taylor Chemical Inc., a subsidiary 80% owned by us. Minor additional revenues are derived from the sale of cadmium.

Marketing

Zinifex Sogem LLC (ZSLLC) acts as an exclusive sales agent for Clarksville with respect to U.S. sales of zinc and cadmium. ZSLLC is 80% owned by the Company and 20% by UMS, the marketing sales arm of Umicore. ZSLLC currently pays a monthly marketing fee to UMS and receives a commission of 1% of zinc sales revenue and 2.5% on cadmium sales.

Typically, 90% of Clarksville's zinc sales are made under annual contract with fixed tonnage and pre-determined delivery schedules. The remaining metal is sold on a spot basis.

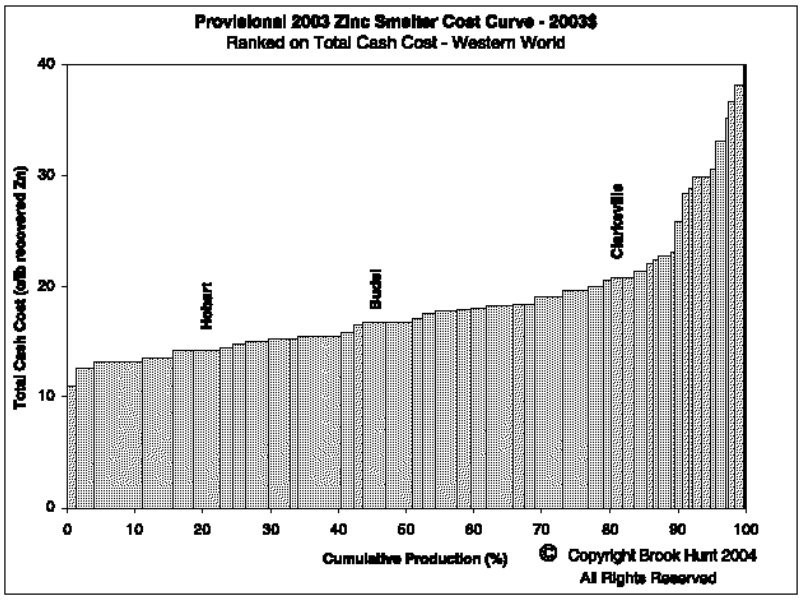
Clarksville's location provides it with a number of competitive advantages. Its proximity to the Eisenhower interstate highway system allows us to keep finished goods inventories low while still offering customers just-in time deliveries. Moreover, 80% of Clarksville's customers are located within an 800 kilometres radius, keeping distribution costs low.

We sell our sulphuric acid through our Zinifex-Taylor joint venture for a price of approximately US$40 per tonne.

Operating Costs

The cost advantages to Clarksville in having a modern cost structure and close location to end use markets are somewhat offset by its modest scale and long feedstock supply chain. At provisional 2003 conditions, Clarksville's relative cash cost position on the Western World industry cost curve, is illustrated below in Brook Hunt's 2003 Total Cost Curve analysis.

Brook Hunt 2003 Total Cost Curve (in US cents)



Brook Hunt's 2003 Total Cost Curves are modelled using base US dollar data for 2002 and estimates of 2003 exchange rates, inflation, metal prices and realisation charges. The full effect of exchange rate and inflation fluctuations in each country has been applied. Our operations have been plotted using forecast calendar year 2003 data supplied by us to Brook Hunt.

Total cash costs for each smelter are determined by analysis of the principal cost components, namely labour, net energy, maintenance materials, consumables and other on-site costs. A credit is given for power generated from, or the sale of, steam from waste heat boilers to arrive at the net energy cost. Total cash costs for each smelter do not include any capital expenditures or depreciation of earlier capital expenditures.

We are endeavouring to improve our unit cost position at Clarksville by improving plant availability. We are working to reduce the number of unplanned shutdowns at the plant by more effectively timing our plant maintenance.

Services and Infrastructure

We obtain power from the Tennessee Valley Authority ("TVA"). While the TVA has not been deregulated, many of the positive features of deregulation have been adopted by the TVA. We completed the negotiations for the renewal of our power contract with the TVA in January 2004. Our power contract has been renewed for a period of ten years.

Our Clarksville smelter is accessible by barge, rail and road for feedstock and product handling.

Logistics

Clarksville is well situated and can receive concentrates by barge, rail or truck. The smelter is connected by conveyor and pipeline to barge unloading and loading facilities situated on the banks of the Cumberland River, which is connected to the Mississippi River. Clarksville is also connected by rail through a short line operated by R J Corman Company and by roads that join the interstate road network.

Imported concentrates are typically barged up the Mississippi river from New Orleans. The concentrates are then unloaded at a barge unloading station, where a conveyor belt takes the concentrate to a storage building. The port comprises a 405 metre long dock, with modern handling equipment capable of receiving barges up to 61 metres long with a 1500 tonne capacity, and one acid loading berth.

The concentrates brought in by rail-car and by truck are unloaded in the same building and then conveyed to the concentrate storage building. Trucks can also dump concentrates directly into the storage building. Product zinc is despatched by road or rail.

Management and Employees

As at December 2003, Clarksville employed 285 people, including contractors. Employees are not covered by union agreements. Turnover and absenteeism at Clarksville are each less than 1.5% and 3.3% respectively.

Safety performance has improved significantly at Clarksville, with the 12-month rolling average LTIFR falling from 16 at June 2002 to 10 at June 2003. The 12 month average MRIFR at June 2003 was 35, a decrease of 29% from the previous year. There was, however, one fatality in January 2002. A thorough investigation was undertaken in conjunction with Tennessee State Authorities, and a number of actions were implemented to minimise the risk of a similar tragedy occurring in the future.

Environmental Management

General

In July 2003, the Office of Solid Waste of the United States Environmental Protection Agency ("USEPA") confirmed the assessment by the Tennessee Department of Environment and Conservation that by-products and wastes at the Clarksville site are generated from beneficiation activities and are therefore exempt from certain Resource Conservation and Recovery Act ("RCRA") regulations under the Bevill Amendments.

This is a positive outcome for Clarksville, as it means that the materials currently stored on-site in impoundments can be treated as solid waste rather than hazardous waste and it removes any immediate requirement to either cap or excavate and dispose of these materials. Clarksville's strategy is to continue to source low iron, high quality concentrates which do not require treatment through a Hot Acid Leaching ("HAL") process, and thus minimises the potential for loss of the current Bevill status and the need for additional capital investment.

Material Environmental Issues.

For more information regarding the methodology which the Company has adopted to identify material environmental issues and estimate their rectification or remediation costs, you should read the first two paragraphs of "Business– Century Mine – Environmental Management – Material Environmental Issues" and read this summary in conjunction with those paragraphs, Annex D and Note 12 to the Pro Forma Historical Financial Information. A summary of our conclusions regarding material issues is outlined below. This summary of material environmental issues must be read in conjunction with the limitations and qualifications summarised in Annex D to this Institutional Offering Memorandum.

Impoundment 1 Capping. Impoundment 1 is currently being used for storage of a variety of materials including iron residues and solid wastes from tank cleanings. The site is currently not permitted to use this

impoundment as a final waste disposal area. However, it is anticipated that the site will need to obtain the relevant permits to allow it to be used as a final waste disposal facility. This will likely require closure and capping of the impoundment. We have assumed that rehabilitation activities will commence sometime between fiscal year 2006 and fiscal year 2011. A 100% likelihood for this has been assumed.

Closure Capping of other Impoundments. Impoundments 2-5 are currently used as process ponds for the storage of iron residues and will require capping at site closure. We have assumed capping activities will commence and be completed in fiscal year 2063 (assumed year of closure). Further, we have assumed a 100% likelihood of capping all four ponds at closure.

Other Issues: Our review also assessed the risk and potential impact of the following issues at Clarksville as being material, but concluded that at the 80% confidence level utilised for planning purposes, the forecast financial impact was less than A$1 million. These risks were related to Gypsum Accumulation and Gordonsville/ Clinch Valley Site Closure. Any change to the assumptions used to evaluate these particular risks, such as confidence level, estimated cost, timing or likelihood of occurrence could however increase this estimated financial impact.

Capital Expenditure Profile

Our capital expenditures in fiscal year 2003 and our proposed capital expenditure plan for Clarksville for fiscal years 2004 and 2005 are shown below.

Capital Expenditure Profile

	Historical	Forecast	
	Fiscal Year Ended or Ending 30 June		
	2003	2004	2005
		(US$ million)	
Compliance			
Health & Safety	0.0	0.0	0.0
Environment	0.0	0.0	0.0
Sustaining			
Asset Maintenance	1.4	1.0	1.5
Maintenance Shutdowns	0.7	2.0	2.0
Growth			
Commercial	—	—	—
Total	2.1	3.0	3.5

We believe that Clarksville's proposed capital expenditure plan is modest. The plan includes replacement of relatively small plant items, as well as environmental expenditures. The plan also provides for meeting long-term average sustaining capital (approximately US$2.2 million each year), but does not include improvements. We have maintained normal maintenance spending levels. A roaster campaign shutdown is planned for April 2004.

ARA

Background

Australian Refined Alloys (ARA) is an acid battery and lead recycling business owned 50% by the Company and 50% by Simsgroup. It operates the only two lead acid battery recycling facilities in Australia at Alexandria in Sydney and Laverton North in Melbourne.

The joint venture agreement was signed in 1984 and the two parties agreed to share the cost of production and receive in kind their share of the lead production. The joint venture is managed by the Company, with product marketing undertaken separately by the Company and Simsgroup.

The Laverton North site has been operating since 1975 and Alexandria since 1979. In addition to profitably producing lead metal, ARA plays an important role in Australia meeting its Basel Convention commitments relating to maximising the domestic treatment of and minimising the trans boundary movements of hazardous wastes.

Asset Strategy

ARA is a relatively low cost operation, which is leveraged to increases in commodity lead prices. Its strategic role in the Company is participation in closing lead's product life cycle and supporting a sustainable future for that metal. Additionally, the linkage of Port Pirie and ARA operations strengthens the Company's Australian market position.

The focus of the business's development is further productivity gains, potentially through consolidation of manufacturing facilities and application of modern techniques for battery breaking.

Process Description

Batteries are first crushed to separate the three main components: lead and lead compounds (approximately 75% of the weight of the battery), acid (approximately 15%) and polypropylene (approximately 5%). Polypropylene is sold for recycling into black plastic products, such as new battery cases, septic tanks, rubbish bins and plant nursery pots.

The lead and lead compounds are recovered from the battery breaking operation and combined with fluxes and reductants in short barrelled rotary furnaces wherein the smelting process yields lead bullion and slag. This stage of the process uses several redundant and recycled materials. The slag is disposed to an approved landfill, while the crude lead is further refined to produce lead and lead alloys.

The sulphuric acid from the battery crushing operation is either neutralised with an otherwise waste lime slurry or supplied to companies for use in the liquid waste treatment industry.

Feedstocks

ARA recycles around 3.8 million batteries annually, together with other lead-containing materials such as drosses, returns from battery manufacture, sheeting and piping. Feedstock costs are relatively independent of lead prices, with metal price changes producing significant changes in ARA's margin.

Australia's battery collection and recycling systems are among the most efficient in the world, with an estimated 96% of lead acid batteries currently recycled. Simsgroup and Metalcorp are the major suppliers to ARA, and account for more than 65% of all batteries collected. Batteries are sourced from all parts of Australia, while importation from Pacific Island countries also occurs. Collection from the remote locations in Australia is supported by ARA freight subsidies.

Production

Combined, the two sites produce over 36,000 tonnes of lead per year. The natural product from the ARA smelters is antimonial or "hard" lead alloys. There is also a capacity to refine approximately 50% of the output, which enables the production of 99.97% pure, or "soft", lead and a range of other lead alloys. The majority of the lead and lead alloy products are used in the battery manufacturing industry and approximately 60% of the markets are based in South East Asian countries.

Our production increased in fiscal year 2003 as growth occurred in the recovery of spent batteries in Australia. Our production data for fiscal years 2001, 2002 and 2003 and our forecasts for fiscal years 2004 and 2005 are set forth below.

	Historical			Forecast	
	Fiscal Year Ended or Ending 30 June				
Production Data (50% Zinifex share)	**2001**	**2002**	**2003**	**2004**	**2005**
Lead Alloys, tonnes	17,235	16,949	18,143	18,883	18,717

Services and Infrastructure

The ARA plants are significant users of natural gas, electricity and oxygen and hold supply contracts with AGL, Origin Energy, Air Liquide and BOC Gases. Water supply and trade waste licences are held with City West Water in Melbourne and Sydney Water in Sydney.

Logistics

ARA's sites are centrally located in Australia's two largest cities, enabling the most efficient collection of batteries from around Australia, which is undertaken by the major recycling companies. The site's lead metal product is transported through road and rail transport to Australian customers and by containers out of Sydney and Melbourne to overseas customers.

Management and Employees

As at January 2004, ARA employed 67 people in Sydney and Melbourne, and all operate under Australian Workplace Agreements.

Safety has improved significantly, with the 12 month rolling average LTIFR falling from 37 in June 2002 to 12 in June 2003 and the average MRIFR decreased by over 50% to 64 in fiscal year 2003.

Each employee is monitored for lead in blood levels and there are strict controls in place once certain trigger points are activated. These points of management intervention are at levels lower than that required by the appropriate legislation. During fiscal year 2003, the average number of employees and contractors above the Company's lead in blood target of 30 micrograms per decilitre was 13.

Environmental Management

Both ARA sites operate under environmental licences issued by the relevant state environmental authorities. Treated site waste waters are governed by Trade Waste Agreements.

Employees

General

As at January 2004, the assets and functions comprising Zinifex Limited and its consolidated entities had 2,558 employees, excluding contractors. A breakdown of our permanent employees and contractors located at each site is set out below.

Site	Permanent	Contractors
Corporate Office	13	0
Shared Service	135	34
ARA	67*	0
Rosebery	190	63
Century	171	500
Hobart	561	109
Port Pirie	688	117
U.S. Operations	249	30
Budel	484	52
Total	2,558	905

* Permanent employees include the J/V employees of ARA.

Approximately 60% of the Zinifex workforce in Australia is covered by enterprise bargaining agreements underpinned by awards that govern terms and conditions of employment. At Century, all employees and contractor personnel are covered by Australian Workplace Agreements, individual contracts and certified agreements negotiated directly with employees.

The enterprise bargaining agreement for our Hobart smelter has expired. Management is currently negotiating with employees to agree a new enterprise bargaining agreement.

In the United States, our Clarksville site is not unionised. In The Netherlands, a Dutch Metals Industry Agreement governs the general terms and conditions for all our employees at the Budel smelter.

Historically, the operations of Zinifex Limited have had a solid industrial relations track record. We have experienced minor stoppages from time to time due to industrial disputes. Generally, this occurs around the time of renewal negotiations of enterprise agreements at our sites.

In the next three years, we will focus in particular on the development of leadership and technical competencies in our organisation, as well as the implementation of succession planning techniques for key roles.

Reputation

A number of significant site-specific issues that were identified by our environmental evaluation also have the potential to impact on the corporate reputation of Zinifex, in addition to the financial impacts identified in Note 12 to the "Pro Forma Historical Financial Information". These issues, which are discussed earlier in this "Business" section for the relevant assets listed below, are:

- Century mine: the rupture of the concentrate pipeline; outrage over discharge of treated water to the Norman River, sinking of the MV Wunma and contamination of land at Morr Morr;
- Rosebery mine: the Hercules mine closure and closure of historical mine and smelter sites, in particular, the Zeehan smelter site;
- Hobart smelter: contamination of marine sediments;
- Port Pirie smelter: community blood lead levels; and metal contamination of agricultural land and sulphur dioxide emissions.

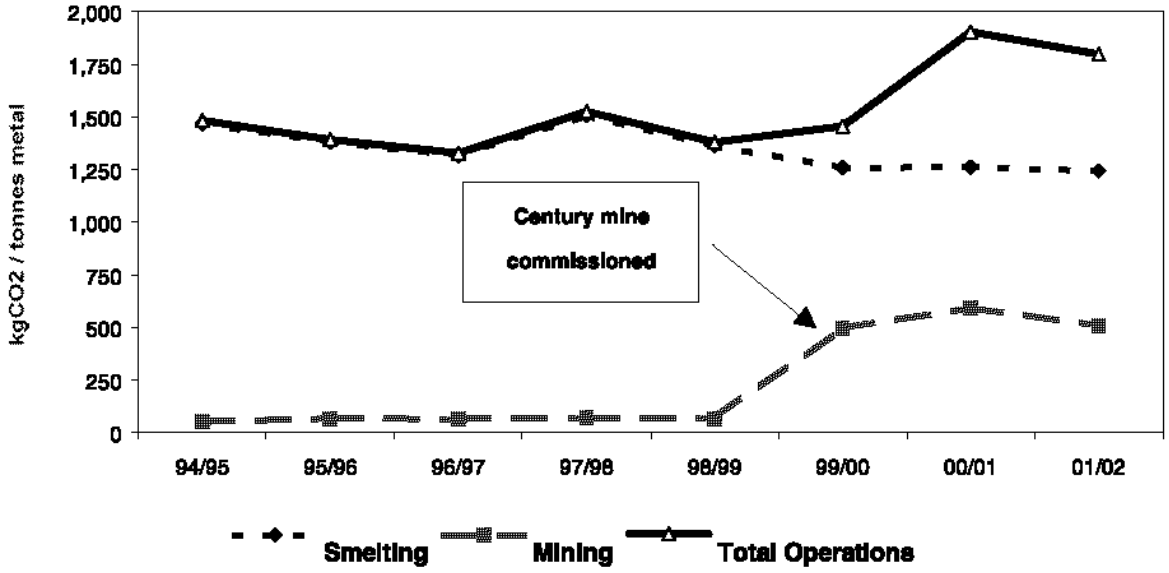
The Company has not attempted to quantify the adverse reputational impacts, or the additional costs, that might arise from any reputational damage arising from these matters, in the event that they occur.

Greenhouse Emissions

In May 1997, Pasminco Limited became a signatory to the Greenhouse Challenge – a voluntary initiative between government and industry to reduce greenhouse gas emissions in Australia. Although Zinifex is not a signatory, the assets that now comprise the Zinifex group have continued to monitor and report on greenhouse gas emissions. We have scheduled internal review of our targets and programs to occur over the next 18 months following the listing of Zinifex.

Details of our progress to date are shown in the following graph utilizing data drawn from the Pasminco 2002 Sustainable Development Report.

Zinifex Australian Operations – Greenhouse Emissions
(Kilograms CO_2 per Tonne Metal Produced)



Note: The carbon dioxide emissions associated with the purchased concentrates fed to our smelters are not included in the Total Operations figures. Accordingly, the total emissions after fiscal year 2000 show an apparent increase due to the commissioning of Century mine and inclusion of a greater proportion of greenhouse gas emissions associated with production of our raw material. The result after 2000, however, does provide a more complete indicator of the carbon dioxide emissions associated with bringing a tonne of finished metal to market.

Our environmental consultant, URS, came to the following conclusions regarding greenhouse gas emissions ("GHG") in their review of the material environmental issues faced by our operations:

- If the Kyoto Protocol comes into force, the Company's operations, particularly those with high energy consumption, may potentially be affected by a number of current or future policy instruments. Australia and the United States have not committed to ratifying the Kyoto Protocol; however, The Netherlands has ratified it.

- In Australia, it is possible that state-based GHG emissions limits will be enacted into legislation. In fact, such legislation has been introduced in New South Wales and Victoria. Companies operating in those states may be subject to direct GHG emissions limits. Companies in these states also may suffer from increased electricity prices passed through by electricity retailers. The Mandatory Renewable Energy Target has also been implemented, via the Renewable Energy (Electricity) Act 2000. Liable parties (i.e., wholesale purchasers of electricity such as electricity retailers and some large industrial users) will need to surrender renewable energy certificates ("RECs") to the Regulator equal to their requirement each year.

- The potential implications of the Kyoto Protocol, or any other international convention on GHG emissions, are currently very difficult to assess. The following policy directions with respect to greenhouse issues may eventuate:

    - Carbon taxes (or their equivalent) of a proportion of site direct GHG emissions.

- Pass-through of the cost of RECs and carbon taxes from the energy retailers to operating sites, in the form of increased electricity prices.

- Exclusion from participation in the flexibility mechanisms under the Kyoto Protocol for companies operating in countries that do not ratify.

- Trade sanctions for non-ratifying countries.

We consider that Budel and Port Pirie are the only sites where GHG emissions are a material issue. Port Pirie is a large consumer of energy, sourced mostly from coal generators.

In The Netherlands, commitments to reduce greenhouse gas emissions at government, industry and community level may lead to increased electricity tariffs. Budel's electricity supply is contracted until June 2005, but increased prices are possible after that date due to the potential introduction of environmental taxes. We have assumed that, in the event of such taxes, additional electricity costs will commence in fiscal year 2006 and have modelled these additional costs to continue for 12 years until fiscal year 2018. Additionally, we have assumed a 70% likelihood of increased tariffs for the Budel operation.

Any change to the assumptions used to evaluate these particular risks, such as confidence level, estimated cost, timing or likelihood of occurrence could however increase this estimated financial impact.

Litigation

We believe that there is no litigation against the Zinifex group of companies that would reasonably be expected to have a material adverse effect on the Company.

VOLUNTARY ADMINISTRATION AND RESTRUCTURING OF PASMINCO LIMITED

Background to Voluntary Administration

On 19 September 2001, in light of difficult trading conditions, significant debt incurred from prior acquisitions and investments, and substantial contingent hedging losses, the directors of Pasminco Limited resolved to place Pasminco Limited and most of its wholly owned Australian subsidiaries into voluntary administration. John Spark and Peter McCluskey of Ferrier Hodgson (Victoria) (the "Administrators") were appointed voluntary administrators of Pasminco Limited and certain subsidiaries under the applicable provisions of the Australian Corporations Act on 19 September 2001 (the "Deed Companies").

Under the Australian Corporations Act, a company may appoint an administrator if its board of directors resolves that, in the opinion of the directors voting for the resolution, the company is insolvent or is likely to become insolvent at some future time and an administrator of the company should be appointed. Voluntary administration is a form of external administration used by Australian companies in financial difficulty in order to give the company respite from the claims of creditors while the administrator, an independent insolvency practitioner, investigates the affairs of the company to assist the creditors to decide whether (i) the company should execute a deed of company arrangement, (ii) the company should revert to normal operations under its directors, or (iii) the company should be wound up in accordance with the rules for winding up in the Australian Corporations Act. A deed of company arrangement typically sets out a plan with the objective of maximising the chances of the company remaining in existence or, if that is not possible, achieving a better return for the company's creditors and members than would result from an immediate winding up of the company.

During the administration, statutory moratorium provisions applied restricting the ability of creditors to bring proceedings and take other action against the Deed Companies. This moratorium gave the Administrators time to investigate the affairs of Pasminco Limited, identify the causes of its financial problems, and propose a restructuring strategy to the creditors.

On 26 September 2001, a committee of creditors consisting of representatives of Pasminco Limited's financiers and employees was formed. Following a period of consultation with the committee of creditors, the Administrators delivered reports on 1 July 2002 and 19 August 2002 to the creditors detailing the results of their investigations and their recommendations for Pasminco Limited's future. The Administrators concluded in the creditors' reports that the restructuring of Pasminco Limited and this Offering were in the best interests of the creditors. The creditors resolved on 30 August 2002 that Pasminco Limited and each of the subsidiaries under administration should execute a deed of company arrangement providing for the restructuring of Pasminco Limited, including this Offering. On 4 October 2002, Pasminco Limited and each of its subsidiaries under administration executed the deeds of company arrangement and the Administrators were appointed administrators of the deeds of company arrangement.

The deeds of company arrangement are expressed to bind all creditors so far as concerns their Pre-VA Claims. Pre-VA Claims include debts or claims based in contract, tort, statute or otherwise, whether present or future, certain or contingent, ascertained or sounding only in damages, the circumstances giving rise to which occurred on or before 19 September 2001, and that would be admissible to proof against the company if the company were being wound up.

The Restructuring

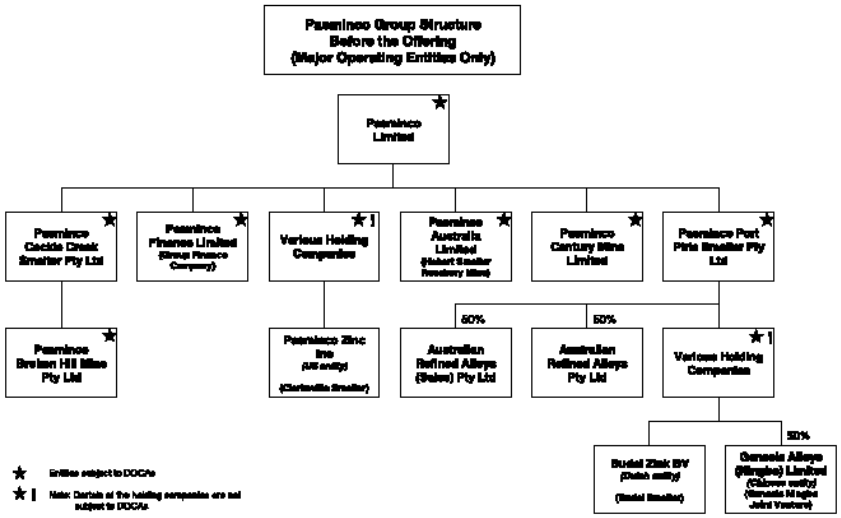
Upon successful completion of this Offering, the restructuring that will be implemented in accordance with the deeds of company arrangement will involve:

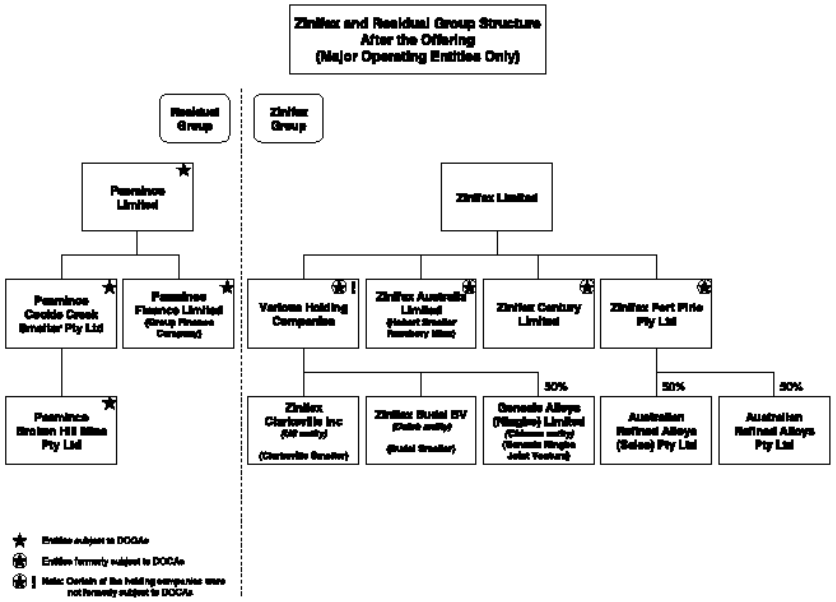
- acquisition by the Company from the Pasminco group of several of its companies that currently contain the Pasminco group's core mining and smelting businesses;

- a residual group of companies of which Pasminco Limited will continue to be the holding company and which will remain subject to the deeds of company arrangement. This residual group will include among others Pasminco Limited, Pasminco Cockle Creek Smelter Pty Limited, Pasminco Broken Hill Mine Pty Ltd and Pasminco Finance Limited; and

- the settlement of the Pre-VA Claims of creditors of the Deed Companies (other than those Pre-VA Claims mentioned below) in exchange for cash generated from proceeds received in the Offering and the liquidation of the companies in the residual group.

The following charts illustrate the main companies that make up the Pasminco group prior to the completion of the restructuring and this Offering and the companies that will make up the Zinifex group after completion of the restructuring and this Offering.





Under the deeds of company arrangement of the Deed Companies, the Pricing Committee composed primarily of creditors with Pre-VA Claims of at least A$5,000,000 was established. One of the functions of the Pricing Committee is to approve the aggregate price achieved under the bookbuild for the Offering. If the pricing committee approves the aggregate price achieved under the bookbuild and the Administrators are satisfied that this Offering is able to proceed through the sale and transfer of shares to investors as contemplated by the deeds of company arrangement, then the Administrators will cause the implementation of the restructuring. The proceeds raised under this Offering will be used to (i) pay the costs and expenses of the Administrators, (ii) repay financiers that provided financing after the commencement of voluntary administration, and (iii) pay creditors of the Deed Companies in settlement of their Pre-VA Claims.

Liabilities of the Zinifex Group After the Restructuring

The deeds of company arrangement expressly provide, and are intended to operate so as to provide, that the Deed Companies acquired by Zinifex from Pasminco Limited will be released from all Pre-VA Claims except for a number of "Excluded Claims".

This release of Pre-VA Claims is expressly provided to take effect immediately upon the Shares being transferred to successful applicants under the Offering.

Excluded Claims under the deeds of company arrangement include:

- Pre-VA Claims to the extent they are covered by an insurance policy (and the relevant insurer agrees, or is ordered by a court, to grant indemnity). Our exposure to these claims would be the excess (deductible) under the applicable insurance policy or the whole claim in the event that the insurer is obliged to pay but does not pay this claim. We believe that our potential liability in respect of claims covered by insurance policies is not material; and

- Pre-VA Claims that are employee entitlement claims, such as workers compensation claims and sick and long-service leave entitlements, including certain employee entitlement claims relating to current and former operations of companies in the Zinifex group. We estimate that our exposure for employee entitlement claims relating to former operations is approximately A$10.8 million. Our expected payments in connection with these claims are expected to be offset by deferred payments dependent upon production, which we expect to be paid by Perilya Limited under the sales contracts for the Broken Hill assets.

There may be claims that relate to the period prior to 20 September 2001 but that are not considered to 'arise' as a matter of law on or before 19 September 2001. For example, in relation to claims in tort (such as personal injury claims relating to lead in blood), there may be complex issues of law as to when the cause of action arises, having regard to when damage is considered to have been suffered by the claimants. Where it is found that the relevant damage was suffered after 19 September 2001, the claim may not be classified as a Pre-VA Claim and, as such, would not be extinguished by the deeds of company arrangement.

Other types of claims that may not be taken to have arisen on or before 19 September 2001 and, therefore, may not be extinguished by the deeds of company arrangement include:

- certain environmental liabilities, even where contamination occurred before 20 September 2001 (see further below);

- tax and stamp duty liabilities, for example where a penalty notice is issued after 19 September 2001, even for a taxing event before 20 September 2001; and

- penalties or fines imposed after 19 September 2001, even where the circumstances giving rise to the liability occurred on or before 19 September 2001.

In relation to environmental liabilities, we have potential environmental liability for claims arising from sites owned or controlled by companies that will make up the Zinifex group following completion of the Offering, as well as sites owned previously by companies that will make up the Zinifex group. Subject to the reservations set out above concerning when claims will be taken to have arisen and the comments below concerning the risk of a successful challenge to the release mechanism in the deeds of company arrangement, the deeds of company arrangement extinguish any liability the Deed Companies might have had for environmental claims against them brought by non-governmental third parties whether individually or as a class, where the circumstances giving rise to the claims occurred before 20 September 2001, including claims at Port Pirie, Hobart, Century and Rosebery.

However, the deeds of company arrangement are unlikely to remove our exposure to liabilities arising from environmental claims brought by governmental bodies. Such liabilities may be in the nature of penalties, fines and remediation orders.

The Administrators will advertise a proof of claims procedure and distribute funds in such a manner as to best ensure that all persons who may have Pre-VA Claims are aware that they may have a Pre-VA Claim and have an opportunity to prove as a creditor under the deeds of company arrangement and receive a distribution.

The release provisions of the deeds of company arrangement are intended to apply, and on their face apply, such that the Deed Companies acquired by Zinifex from Pasminco Limited will be released from a Pre-VA Claim even if a claimant has not had an opportunity to prove in respect of the Pre-VA Claim and has not received a distribution before all funds are distributed. Notwithstanding this, there are provisions in the Australian Corporations Act which confer broad discretionary powers on courts to make orders bearing upon companies that are or have been subject to administration. It is possible that a claimant who has not had an opportunity to prove as a creditor under the deeds of company arrangement and has not received a distribution before all funds are distributed might seek to rely on these provisions to obtain orders allowing the claimant to proceed against the Deed Companies acquired by Zinifex.

Having regard to:

- the clear release mechanism in the deeds of company arrangement;
- the fact that the deeds of company arrangement are intended to operate such that the Deed Companies acquired by Zinifex from Pasminco Limited will be released from all Pre-VA Claims (except those discussed above) so as to increase the value of the Zinifex Group for the benefit of all creditors; and
- the fact that there is no precedent for such court orders being granted in similar circumstances,

the Administrators consider that it is unlikely that a court would make such orders.

It is also possible that a person who is aware that the person has a Pre-VA Claim and has an opportunity to prove as a creditor under the deeds of company arrangement and obtain a distribution will attempt to avoid the operation of the deeds of company arrangement by seeking to rely upon the court's discretion to recover their entire claim against one or more Deed Companies acquired by Zinifex rather than having their Pre-VA Claim compromised under the deeds of company arrangement. Again, having regard to the above factors, the Administrators consider that it is unlikely that a court would make such orders.

In addition, the following claims are not Pre-VA Claims and are therefore not compromised by the deeds of company arrangement:

- Claims arising at any time against those companies in the Zinifex group that have not executed deeds of company arrangement. These are primarily the companies that own our Netherlands operations, our U.S. operations and our interest in the ARA joint venture;

- All claims against Deed Companies arising after 19 September 2001. For example, an unpaid trade creditor of a Deed Company whose claim arose prior to 20 September 2001 would have its claim settled in the restructuring whereas we would remain liable for an unpaid trade creditor of a Deed Company whose claim arose after 19 September 2001; and

- Indemnities in favour of the Administrators in connection with companies in the Zinifex group. These are discussed below.

Contracts Affected by the Voluntary Administration

A number of contracts that are material to the operations of the Zinifex group of companies are terminable at the election of the other contracting party as a result of the voluntary administration of the relevant Pasminco group company. In the majority of cases, waivers have been obtained to such termination rights or the contracting party has continued to supply products or services on the terms of the existing contract and no notice of termination has been received.

Limitations on the Liability of the Administrators

The deeds of company arrangement contain provisions that are expressed to limit significantly the liability of:

- the Administrators for liabilities incurred by the Administrators in relation to the voluntary administration of Pasminco Limited and the subsidiaries previously under voluntary administration;

- the Administrators for liabilities incurred by them in relation to their administration of the deeds of company arrangement; and

- the Administrators for liabilities incurred by them in relation to the restructuring and this Offering.

Indemnities in Favour of the Administrators

Each Deed Company also indemnifies the Administrators under its deed of company arrangement, under the Australian Corporations Act and as a matter of general law for liability incurred by:

- the Administrators in relation to the voluntary administration of Pasminco Limited and the subsidiaries formerly under voluntary administration;

- the Administrators for liabilities incurred by them in relation to the administration of the deeds of company arrangement; and

- the Administrators for liability incurred by them in relation to the restructuring and this Offering.

Notwithstanding the above, after the Offering is completed, the Administrators will cease to be indemnified by us in the manner described above for liability incurred by them in relation to the voluntary administration of a company in the residual group or the administration of the deed of company arrangement in respect of a company in the residual group, even where the circumstances giving rise to the liability occurred before the Offering is completed.

Aquila Proceedings

The Administrators have commenced proceedings for directions and other associated orders in the Federal Court of Australia relating to their dealings with a specific portion of the proceeds of the Offering to be received and dealt with by Pasminco. See "The Offering". The proceedings relate principally to the transfer to Zinifex of the Clarksville smelter, currently controlled by Savage Resources Limited (Subject to Deed of Company Arrangement) ("Savage"). Upon completion of the Offering, Savage will become a residual group company.

Zinifex is not involved in these proceedings. The proceedings are only necessary because of the claims of a contingent creditor, Aquila Resources Ltd ("Aquila"), that may require the Administrators to treat the assets of Savage and its creditors in a different fashion to the other companies in the residual group. Relevantly, this will only have an impact on the distribution of a portion of the proceeds of the Offering to be received by Pasminco.

Aquila maintains that it is a creditor of Savage (as well as a creditor of Pasminco and another company that will be in the residual group of companies) and that the Savage group of companies should not be treated as grouped for dividend purposes. Aquila has also challenged the entry into the deeds of company arrangement of two of the companies in the residual group.

Aquila's claims have not been admitted or accepted by the Administrators and are the subject of separate proceedings by Aquila. Those proceedings do not involve Zinifex.

Security Trust

A Security Trust Deed was put in place on 4 October 2002 during the voluntary administration to enable the Pasminco Group to operate during that phase. The Security Trust has been preserved to facilitate Zinifex group's financing after the Offering.

The Security Trust is intended to collapse and terminate once Zinifex's working capital facility is paid out and restructured on an unsecured basis, and once the PPT loan is paid. See "Management Discussion and Analysis of Financial Condition and Results of Operations – Capital Resources".

SELECTED PRO FORMA HISTORICAL FINANCIAL AND OPERATING INFORMATION

The pro forma historical financial and operating information set forth below should be read in conjunction with, and is qualified in its entirety by reference to "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the audited or reviewed pro forma historical financial information of Zinifex Limited included elsewhere in this Institutional Offering Memorandum.

Cautionary Note about Pro Forma Historical Financial Information

Our pro forma historical financial information is intended for informational purposes only and does not purport to be indicative of the results that we would actually have obtained during the periods presented and is not necessarily indicative of operating results we expect in future periods. Our pro forma historical financial information was prepared in accordance with Australian GAAP, which differs in certain material respects from U.S. GAAP. For a discussion of differences between Australian GAAP and U.S. GAAP that could be significant to our consolidated results of operations and financial condition, see "Annex B – Significant Differences Between Australian GAAP and U.S. GAAP".

The pro forma historical financial information regarding Zinifex that is included in this Institutional Offering Memorandum has been prepared by combining the results of operations and financial position of each of the legal entities and operations that will form part of the Company following the restructuring described in "Voluntary Administration and Restructuring of Pasminco Limited" and which formed part of Pasminco Limited's operations in each of the historical periods. The combined amounts may not correlate to the results of operations and financial position that would have been the case if Zinifex had been an independent company during the periods presented. This is because:

- our ongoing businesses were part of the larger Pasminco Limited group during these periods;
- the historical financial information reflects the capital structure of Zinifex following our restructuring pursuant to deeds of company arrangement and does not purport to represent what our capital structure would have been had we operated during these periods;
- our financial statements reflect allocations, primarily with respect to corporate and other expenses, for services provided to us by Pasminco Limited. These allocations are based upon estimates and assumptions made by us, and may not necessarily reflect the costs we would have incurred for similar services as an independent company;
- we may have been exposed to different financial and business risks if we had been an independent company rather than as part of Pasminco Limited and the effect of these different risks may not be reflected in our pro forma historical financial information; and
- our business, organisational structures and operations have changed significantly as a result of the voluntary administration, deed of company arrangement and restructuring process.

Accordingly, the pro forma historical financial information included in this Institutional Offering Memorandum is not necessarily indicative of our future financial position or results of operations. Investors should carefully consider the normalisation adjustments described below.

Also for these reasons, we do not believe that a pro forma statement of cash flow would be useful to investors and therefore such a statement has not been provided. However, we have prepared a forecast of cash flows for fiscal year 2005. See "Certain Prospective Financial Information."

Basis of Preparation and Presentation

Set forth below is a summary of:

- pro forma historical consolidated EBIT for fiscal years 2001, 2002 and 2003 and fiscal half years 2003 and 2004, including normalisation adjustments;
- a pro forma statement of financial position as at 31 December 2003; and
- selected operating data.

Our pro forma historical financial information has been normalised from the pro forma historical financial information of Pasminco Limited to reflect our assets and operations after giving effect to certain transactions that occurred prior to the restructuring, transactions contemplated by the deeds of company arrangement and other adjustments. This pro forma historical financial information is intended for informational purposes only and does not purport to be indicative of the results that we would actually have obtained during the periods presented and is not necessarily indicative of operating results expected in future periods. See "Selected Pro Forma Historical Financial and Operating Information – Normalisation Adjustments" and "Pro Forma Historical Financial Information" for a description of these normalisation adjustments. Our pro forma historical financial information included in this Institutional Offering Memorandum does not purport to be in compliance with Article 11 of Regulation S-X of the Rules and Regulations of the SEC. See "Financial Statement Presentation".

Depreciation and amortisation expense disclosed in the pro forma historical consolidated EBIT represents the actual depreciation and amortisation reflected in the financial statements of the acquired entities adjusted for the application of consistent accounting policies and discontinued operations. Historical depreciation and amortisation has not been adjusted to reflect adjustments to the value of non-current assets arising as a consequence of our acquisition of the entity or assets in the restructuring process or asset write-downs during the historical periods presented relating to assets in the companies that will make up Zinifex following the Offering.

Our pro forma historical financial information has been provided only to the EBIT level. The entities and assets that formed Pasminco Limited operated under substantially different corporate structures, with different gearing, treasury, accounting policies and tax profiles.

Our independent accountant has reported on the pro forma historical financial information in the Independent Accountant's Report commencing on page F-2.

Normalisation Adjustments

The following adjustments have been made to the results of Pasminco Limited in arriving at the amounts included in the pro forma historical combined statement of financial performance for Zinifex:

	Fiscal Year			Fiscal Half Year	
	2001	2002	2003	2003	2004
			(in A$ millions)		
Total Revenue from ordinary activities before adjustments[1]	2,319.3	2,039.8	1,767.0	884.7	830.5
Divested activities[2]	(33.2)	(17.9)	(17.8)	(10.3)	(16.6)
Residual group activities[3]	(513.9)	(219.6)	(106.5)	(54.1)	(31.6)
Foreign exchange hedging[4]	130.0	35.3	(12.7)	9.3	—
Interest income[1]	(10.4)	(3.3)	(3.3)	(1.7)	(3.1)
Reclassification[7]	(9.4)	4.9	(2.6)	2.2	—
Total Revenue from ordinary activities after adjustments	1,882.4	1,839.2	1,624.1	830.1	779.2
Profit /(loss) from ordinary activities before interest, tax, depreciation and amortisation (before adjustments) – EBITDA	(1,789.8)	12.3	209.5	35.0	(67.6)
Divested activities[2]	88.1	16.2	22.2	9.2	(21.9)
Residual group activities[3]	179.2	7.4	(144.5)	55.9	(138.5)
Foreign exchange hedging[4]	979.0	22.3	(12.7)	9.3	—
Asset write downs[5]	893.0	111.1	105.3	—	292.9
Operating lease payments for PPTV assets[6]	(8.5)	—	—	—	—
Rehabilitation provisions[8]	—	44.0	(38.5)	—	60.1
IPO and administration costs[9]	—	20.3	33.3	21.8	6.0
Other financing related[10]	129.4	23.2	—	—	—
Reclassifications[7]	—	41.2	4.6	(0.2)	—
Profit from ordinary activities before interest, tax, depreciation and amortisation (after adjustments) – EBITDA	470.4	298.0	179.2	131.0	131.0
Depreciation and amortisation (before adjustments)	(356.0)	(243.4)	(227.0)	(107.7)	(119.6)
Divested activities[2]	22.1	28.5	7.1	1.1	0.4
Residual activities[3]	59.6	23.1	1.5	0.9	—
PPTV assets[6]	4.1	—	—	—	—
Reclassifications[7]	—	(41.2)	(4.6)	(5.1)	—
Depreciation and amortisation (after adjustments)	(270.2)	(233.0)	(223.0)	(110.8)	(119.2)
EBIT (after adjustments)	200.2	65.0	(43.8)	20.2	11.8

(1) The pro forma historical financial information has been provided only to the EBIT level. The entities acquired by Zinifex Limited historically operated under substantially different corporate structures, with different gearing and tax profiles and therefore historical interest and tax expense is not considered to be meaningful or appropriate.

(2) The revenues and results of entities or businesses that have previously been disposed of by Pasminco Limited have been excluded from the pro forma historical financial information.

(3) The revenues and results of entities not being acquired by Zinifex Limited have been excluded from the pro forma historical financial information. The exception to this is the operating costs of Pasminco Limited which have been included on the basis that these head office costs would have been incurred by Zinifex Limited.

(4) Zinifex Limited has adopted a different hedging policy in respect of foreign currency, therefore the foreign currency hedging gains and losses incurred by Pasminco Limited have been excluded from the pro forma historical financial information.

(5) Pasminco Limited incurred significant asset write-downs during the periods in order to restate the asset values to their recoverable amount. Upon acquisition by Zinifex Limited the asset values are recognised at their fair values. These asset write-downs have been excluded from the pro forma historical financial information, as they do not relate to the asset values recognised by Zinifex Limited.

(6) As at 1 July 2000 the accounting treatment for the port, pipeline and transfer vessel assets at the Century mine (collectively referred to as the PPTV assets) was changed to recognise the assets as owned by Pasminco rather than as an operating lease. The change in accounting treatment resulted in a net credit to expenses of A$4.4 million being recognised in fiscal year 2001 that would have been recognised in fiscal year 2000 had the assets been treated as owned in that year. Adjustments have been made to reflect this net credit to expenses in the appropriate year in the pro forma historical financial information.

(7) Reclassifications of revenue were to ensure the consistent treatment of aluminium costs at the Hobart smelter, freight revenue and foreign exchange gains and losses on contracts, across all periods. Reclassifications of EBITDA were to treat asset write downs as depreciation and ensure consistent treatment of finance charges across all periods.

(8) Relates to non-recurring provisions that will not be incorporated in the results of the Company.

(9) Comprises costs relating to the external administration of the Company during voluntary administration and consulting costs associated with the Offering.

(10) Relates to foreign exchange losses associated with a debtors securitisation programme that ceased in September 2001 and forward silver sale and silver swap contracts that were terminated in September 2001.

Pro Forma Historical Financial Information

Summary of Pro Forma Historical Consolidated EBIT

Set out in the table below is a summary of our pro forma historical EBIT for fiscal years 2001, 2002 and 2003 and fiscal half years 2003 and 2004.

	Fiscal Year			Fiscal Half Year	
	2001	2002	2003	2003	2004
			(in A$ millions)		
Consolidated					
Revenue:					
Sales revenue	1,865.1	1,835.4	1,622.4	825.7	775.9
Other revenue[1]	17.3	3.8	1.7	4.4	3.3
Total revenue	1,882.4	1,839.2	1,624.1	830.1	779.2
Operating Costs:					
Changes in inventories	(10.0)	22.6	(36.0)	(12.5)	(4.0)
Raw materials and consumables	(591.8)	(734.8)	(604.7)	(283.5)	(268.7)
Freight expenses	(162.2)	(158.3)	(156.2)	(79.9)	(71.3)
Energy expenses	(190.5)	(189.6)	(216.9)	(104.1)	(107.0)
Employee benefits expenses	(230.8)	(228.3)	(237.9)	(128.5)	(113.7)
Contracting and consulting expenses	(113.2)	(160.9)	(149.6)	(67.8)	(49.0)
Restructuring expenses	(34.2)	7.0	4.0	—	—
Other expenses from ordinary activities	(79.3)	(98.9)	(47.6)	(22.8)	(34.5)
Total operating costs	(1,412.0)	(1,541.2)	(1,444.9)	(699.1)	(648.2)
EBITDA[2]	470.4	298.0	179.2	131.0	131.0
Depreciation and Amortisation[3]	(270.2)	(233.0)	(223.0)	(110.8)	(119.2)
EBIT[4]	200.2	65.0	(43.8)	20.2	11.8
Segment Information					
Sales Revenue by site					
Century	427.6	373.5	416.7	233.0	238.5
Rosebery	112.3	99.0	98.3	52.9	56.0
Hobart	477.0	475.5	402.2	203.4	196.2
Budel	488.0	349.1	337.8	167.8	177.5
Clarksville	270.3	207.5	181.9	93.0	78.2
Port Pirie	401.7	474.0	464.2	235.9	216.9
ARA	16.4	17.7	16.0	7.8	8.4
Corporate / Other[5]	1,037.7	231.1	5.7	2.6	6.2
Inter company eliminations[5]	(1,365.9)	(392.0)	(300.4)	(170.7)	(202.0)
Total Sales Revenue	1,865.1	1,835.4	1,622.4	825.7	775.9

	Fiscal Year			Fiscal Half Year	
	2001	2002	2003	2003	2004
	(in A$ millions)				
EBITDA by site					
Century	213.8	172.6	134.5	84.2	121.0
Rosebery	47.5	25.2	30.6	17.7	24.4
Hobart	107.4	82.9	28.1	28.9	(0.8)
Budel	89.8	36.3	28.1	17.5	18.8
Clarksville	29.7	7.5	(3.8)	1.2	(2.9)
Port Pirie	47.3	51.8	21.4	12.5	10.3
ARA	4.6	4.7	1.7	1.1	1.5
Corporate / Other	(88.6)	(83.7)	(59.8)	(25.5)	(25.1)
Inter company eliminations	18.9	0.7	(1.6)	(6.6)	(16.2)
Total EBITDA	470.4	298.0	179.2	131.0	131.0
EBIT by site					
Century	56.1	33.0	(9.1)	12.6	38.1
Rosebery	29.8	4.4	10.2	7.6	12.5
Hobart	80.8	56.4	6.9	18.0	(11.4)
Budel	74.5	20.8	11.9	9.5	11.4
Clarksville	10.0	4.8	(6.9)	(0.1)	(3.1)
Port Pirie	25.3	26.7	4.1	4.1	4.7
ARA	4.3	4.4	1.4	1.0	1.3
Corporate / Other	(99.5)	(86.2)	(60.7)	(25.9)	(25.5)
Inter company eliminations	18.9	0.7	(1.6)	(6.6)	(16.2)
Total EBIT	200.2	65.0	(43.8)	20.2	11.8

(1) Other revenue includes proceeds from sales of non-current assets, insurance recoveries and miscellaneous other revenues.

(2) EBITDA means profit from ordinary activities before borrowing costs, income tax expense and significant items excluding interest income and after adding back depreciation and amortisation and after the normalisation adjustments identified above. We believe that EBITDA provides useful information regarding our company, but it should not be considered as an indication of, or alternative to, operating or net profit as an indicator of operating performance or as an alternative to cash flows from operating activities as a measure of liquidity, in each case determined in accordance with Australian GAAP. EBITDA is included for convenience only and may not be comparable to similarly titled measures reported by other companies.

(3) Depreciation and amortisation in the pro forma historical financial information represents the actual depreciation and amortisation reflected in the financial records of the entities we acquired, adjusted for the application of consistent accounting policies and discontinued operations. Historical depreciation and amortisation has not been adjusted to reflect adjustment to the value of non-current assets arising as a consequence of our acquisition of the entity or assets or asset write-downs during the historical periods presented relating to assets in the companies that will make up the Zinifex group following the Offering. See "Pro Forma Historical Financial Information" for a description of historical depreciation and amortisation.

(4) EBIT means profit from ordinary activities before borrowing costs, income tax expense and significant items excluding interest income and after the normalisation adjustments identified above. We believe that EBIT provides useful information regarding our company, but it should not be considered as an indication of, or alternative to, operating or net profit as an indicator of operating performance or as an alternative to cash flows from operating activities as a measure of liquidity, in each case determined in accordance with Australian GAAP. EBIT is included for convenience only and may not be comparable to similarly titled measures reported by other entities.

(5) Corporate revenue includes the business activities of Pasminco Metals Pty Ltd, which in fiscal year 2001 and for part of fiscal year 2002 acted as a trading company acquiring metals from the Australian smelting sites and then selling zinc, lead and other metals to customers. This activity ceased in October 2001. Sales revenue includes revenue from the shipment of acid on behalf of an external party.

SELECTED PRO FORMA STATEMENT OF FINANCIAL POSITION

Our pro forma consolidated statement of financial position as at 31 December 2003 has been prepared as if the transactions contemplated by the deeds of company arrangement had occurred at that date and also assumes the capital and debt structure following the Offering is in place at that date.

	As at 31 December 2003 (in A$ millions)
Current Assets:	
Cash assets[1]	48.8
Receivables	167.2
Inventories	273.2
Other	17.0
Total current assets	506.2
Non-Current Assets:	
Receivables	11.2
Property, plant and equipment	1,561.8
Other	7.4
Total non-current assets	1,580.4
Total Assets	2,086.6
Current Liabilities:	
Payables	108.5
Interest bearing liabilities[2]	30.7
Provisions	57.3
Other	7.7
Total current liabilities	204.2
Non-Current Liabilities:	
Payables	0.4
Interest bearing liabilities[2]	160.3
Deferred tax liabilities	245.0
Provisions	237.1
Total non-current liabilities	642.8
Total Liabilities	847.0
Net Assets	1,239.6
Contributed Equity	1,239.6

(1) Cash assets as at 1 April 2004 are expected to be A$66.0 million. See "Certain Prospective Financial Information for Zinifex – Prospective Cash Flow Statement".

(2) Total current and non-current interest-bearing liabilities as at 1 April 2004 are expected to be A$180.0 million.

The adjustments that were applied to the historical statement of financial position of Pasminco Limited to generate the pro forma statement of financial position are set out in the pro forma historical financial information included in this Institutional Offering Memorandum.

SELECTED OPERATING DATA

The following table sets out certain operating data underlying our historical financial and operating information for fiscal years 2001, 2002 and 2003, and fiscal half years 2003 and 2004.

	Fiscal Year			Fiscal Half Year	
	2001	2002	2003	2003	2004
Mining production:					
Ore mined (tonnes)	5,515,915	5,612,447	5,973,608	3,037,798	3,015,826
Contained zinc in concentrate (tonnes)	489,560	548,831	601,444	307,374	287,823
Contained lead in concentrate (tonnes)	80,293	112,275	91,374	43,025	53,058
Smelter production:					
Zinc metal (tonnes)	599,217	595,759	618,784	309,972	315,257
Lead metal (tonnes)	232,456	291,961	285,627	137,356	140,315
Silver metal (kilograms)	364,273	431,626	461,600	238,360	201,910
Net Sales:					
Net zinc metal sold (tonnes)[1]	493,782	549,921	617,160	317,392	295,326
Net lead metal sold (tonnes)[1]	80,271	121,669	130,802	54,721	75,471
Average realised zinc price on net zinc metal sold (US$/tonne)[2]	1,038	830	779	764	867
Average LME zinc price (US$/tonne)	1,051	792	774	769	875
Average zinc realisation and selling costs (US$/tonne)	53	49	57	58	57
Average net margin on zinc metal sales (US$/tonne)[3]	548	470	421	420	447
Average realised lead price on net lead metal sold (US$/tonne)[2]	527	529	455	393	546
Average LME lead price (US$/tonne)	443	474	445	432	572
Average lead realisation and selling costs (US$/tonne)	65	67	68	76	69
Average net margin on lead metal sales (US$/tonne)[3]	224	219	219	201	246
Average treatment charge on zinc concentrates sold (US$/tonne of concentrate)[4]	135	127	104	111	119
Average treatment charge on zinc concentrates purchased (US$/tonne of concentrate)[4]	146	142	127	90	123
Net zinc concentrates purchased/(sold) (tonnes)[6]	274,341	158,113	67,636	(13,765)	82,899
Average treatment charge on lead concentrates sold (US$/tonne of concentrate)[4][5]	190	159	80	—	124
Average treatment charge on lead concentrates purchased (US$/tonne of concentrate)[4]	127	126	115	117	139
Net lead concentrates purchased (tonnes)[6]	230,229	243,364	275,521	151,388	111,052
Average realised A$/US$ exchange rate on net US dollar revenue	0.5342	0.5523	0.6173	0.5376	0.6833
Net US dollar exposure (US$ millions)[7]	550	508	493	232	244
Average realised A$/Euro exchange rate on net Euro costs	0.6001	0.5897	0.6051	0.5640	0.5960
Net Euro exposure (Euro millions)[8]	89	77	75	33	32
Operating Costs:					
Cash conversion costs per tonne of contained metal produced:[9]					
Mining (A$/tonne)	564	514	551	552	593
Smelting (A$/tonne)	545	532	529	539	497
Total cash conversion costs (A$/tonne)	553	524	538	545	538
Total conversion costs per tonne of contained metal produced:[10]					
Mining (A$/tonne)	680	617	636	633	679
Smelting (A$/tonne)	645	611	592	604	549
Total conversion costs (A$/tonne)	659	613	611	616	605

(1) Includes finished metal sales and payable metal in concentrate sales to third parties, less payable metal in third-party concentrate purchases.

(2) Represents the average LME metal price achieved on third-party metal sales and purchases, excluding premiums.

(3) Represents the net revenue less cost of raw materials purchased, per tonne of metal sold to the external market.

(4) Represents average total treatment charge/income, including price escalator/de-escalator, per tonne of concentrate sold and purchased.

(5) No external lead sales were made during fiscal half year 2003.

(6) Represents third-party concentrate sales less third-party concentrate purchases.

(7) Represents third-party US$ denominated revenues less third-party US$ denominated costs.

(8) Represents third-party Euro denominated revenues less third-party Euro denominated costs.

(9) Excludes selling, general and administrative, debt service, depreciation, depletion and amortisation (other than mine development costs). Contained metal includes zinc and lead.

(10) Excludes selling, general and administrative and debt service. Contained metal includes zinc and lead.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Our management's discussion and analysis of financial condition and results of operations is intended for informational purposes only and does not purport to be indicative of the results that actually would have been obtained during the period presented and is not necessarily indicative of operating results to be expected in future periods. You should read the pro forma historical financial information in conjunction with the assumptions underlying its preparation as set out in "Selected Pro Forma Historical Financial and Operating Information", the Independent Accountant's Report commencing on page F-2, the risk factors set out under "Risk Factors", and the other information contained in this Institutional Offering Memorandum. Our pro forma historical financial information was prepared in accordance with Australian GAAP. For a discussion of certain differences between Australian GAAP and U.S. GAAP that could be significant to our Company's consolidated results of operations and financial condition—see Annex B—Significant Differences Between Australian GAAP and U.S. GAAP.

Overview

We operate an integrated zinc and lead mining and smelting business with operations in Australia, The Netherlands and the United States. We generate revenue principally from the sale of zinc and lead metal from our smelters and zinc and lead concentrates from our mines, although our mines also supply most of the concentrate requirements of our smelters. Our principal products are zinc and lead metal, but we also sell silver, copper, gold, sulphuric acid and other by-products and minor metals. We sell our zinc and lead metal products primarily in Australia, Asia, Europe and the United States.

Our operations are comprised of six principal operating assets. Our most significant mining operation is the open-cut Century mine in Queensland, which produces zinc and lead concentrates. We also operate the Rosebery mine in Tasmania, which produces primarily zinc and lead concentrates, but also copper concentrates and gold doré. The Century mine supplies concentrates to our smelters as well as to third parties, while the Rosebery mine zinc and lead concentrates are supplied wholly to our smelters.

We operate two primary smelters in Australia – the Hobart electrolytic zinc smelter in Tasmania and the Port Pirie zinc and lead smelter in South Australia. We also operate one of Europe's largest and most efficient zinc smelters at Budel in The Netherlands, and an electrolytic zinc smelter in Clarksville, Tennessee in the United States. Almost all of Budel's zinc concentrate feed is sourced from our Century mine, while our Australian smelters source concentrates from Century, Rosebery and external suppliers. Our integrated nature enables us to maintain a high level of smelter utilization and provides us with the flexibility to manage effectively inventory levels.

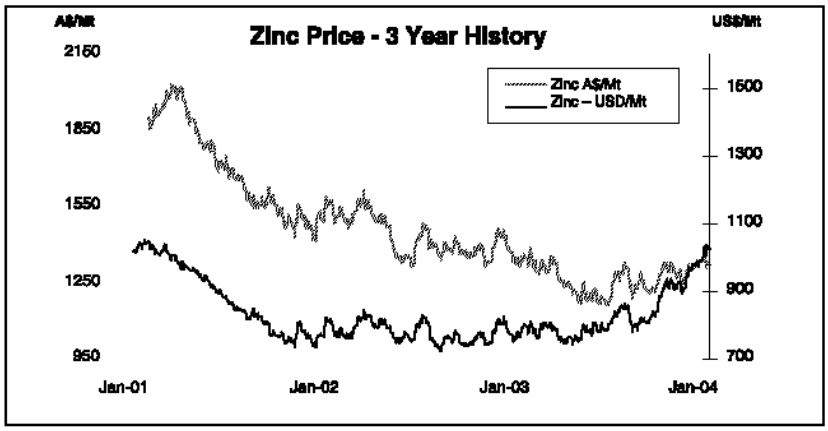
As a major global mining and smelting company, our financial and operational performance and prospects are influenced by a number of important factors. These factors include metal prices, treatment charges, foreign currency exchange rates, marketing initiatives, business improvement programmes, mine development and mine planning, sustaining and growth capital expenditure and environmental management. Outlined below is a discussion of these key factors that affect our financial performance.

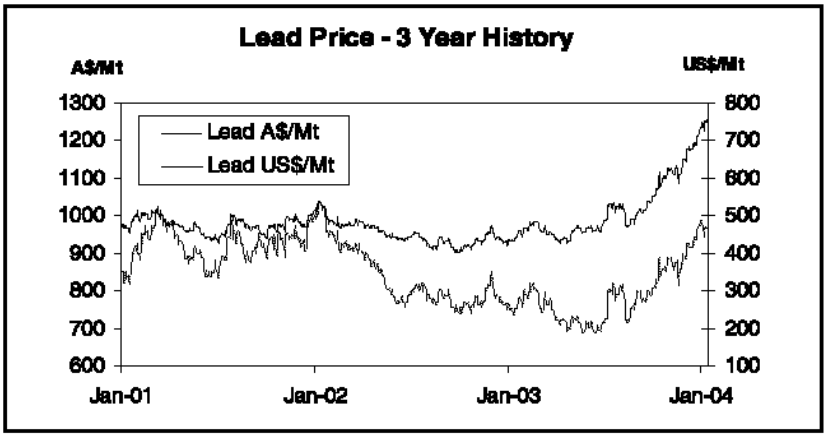
Metal Prices and Treatment Charges

Our zinc and lead metal sales are denominated in US dollars and priced in accordance with monthly average reference prices from the London Metal Exchange or LME. For most of our sales of zinc and lead metal, we charge a premium above the base LME price reflecting in some cases transportation costs and other additional costs associated with customer product specifications. We are also able to generate premium prices for our value-added products, such as our zinc alloy products. We usually negotiate the price premiums for our zinc and lead metal products annually as the duration of these metal contracts is generally one year. Under these contracts, customers often have the ability to vary monthly deliveries within an agreed range depending on their production requirements.

We have recently implemented a new marketing arrangement pursuant to which Trafigura Beheer B.V. ("Trafigura") will purchase all our available commodity grade zinc and lead metal produced at our Hobart and Port Pirie smelters that is in excess of demand from Australian and New Zealand customers. The terms of these marketing arrangements include set premia for both zinc and lead.

The table below sets forth historical zinc and lead prices for the three-year period from 1 January 2001 to 1 January 2004.





Our zinc and lead concentrate sales are also based on monthly average prices from the LME. Smelters that receive concentrates from mines charge the mines with a treatment charge. The revenues we book for concentrate sales are net of these treatment charges. The treatment charges from zinc smelting businesses typically fall within the range of 13% and 25% of LME prices. We usually sell concentrates under long-term contracts with terms of greater than one year, where the annual tonnages are agreed under the contract, but the terms of sale are negotiated annually. Our smelters consume a significant portion of our concentrates, as well as purchasing concentrates from external sources. Our internal concentrate sales from our mines to our smelters are on terms that we believe are equivalent to those we can achieve on our external sales of concentrates. We also sell a small portion of our zinc and lead concentrates and metals on the spot market.

Aside from short-term hedging transactions to cover timing risk between third-party concentrate purchases and sales of metal and to cover our exposure on fixed-price forward sales of metal customers, we generally do not, and it is currently not our intention to, enter into commodity price hedging contracts. As a result, our historical and future financial results are highly sensitive to the LME prices of zinc and lead. LME metal prices are subject to changes in supply and demand, and are characterised by significant fluctuations over time. This

volatility of metal prices, particularly zinc and lead prices, means that our sales revenues, raw material purchases and earnings will vary considerably from period to period. In addition, as a large component of our operating costs are in Australian dollars, the A$ price of zinc and lead has more of an impact on our financial performance than the US dollar price of these commodities.

Zinc and lead metal prices are influenced by a number of factors, including industry supply and demand dynamics, general economic activity and industrial production, housing and industrial construction activity, activity in the automotive industry and other factors. For a description of the zinc and lead industries, see "Zinc and Lead Industry Overview".

Foreign Currency Exchange Rates

Our financial statements are reported in Australian dollars and our costs are generally denominated in Australian dollars, Euros or US dollars, depending on the currency of the country in which the operations are located, although some costs are either expressed in US dollars, such as sea freight, or linked to the US dollar price of metals and other commodities, such as oil, coal and coke, regardless of where the operation is located. On the other hand most of our sales revenue is denominated in US dollars. As a result, movements in the A$/US$ and to a lesser extent A$/Euro will affect our reported results. We generally do not, and it is currently not our intention to, enter into hedging transactions to mitigate exposure to movements in these currency exchange rates. During our fiscal year 2004, the Australian dollar has appreciated significantly compared to the US dollar. Although this has had an impact on our financial results for the current fiscal year, the coincident rise in the LME metal prices has generally offset the impact of the Australian dollar appreciation.

Marketing Initiative

Prior to January 2004, we exported a large portion of our Hobart zinc products and Port Pirie lead products to warehouses in major zinc consuming Asian countries and sold the products ex-warehouse to our customers. We bore the costs of working capital, alloying, freight and warehousing which were offset by the customer paying a premium over the LME metal price. Commencing January 2004, under an agreement with Trafigura, we ceased supplying customers from warehouses in Asia and now sell this lead and zinc FOB to Trafigura. The net margin, or premium over LME prices less realisation costs, under the Trafigura agreement represents a considerable improvement over our previous arrangements. Additionally, we expect to gradually release a considerable amount of working capital under the Trafigura agreement as our products are sold under shorter payment terms and we will be able to reduce our inventory levels. The Trafigura agreement does not include our zinc and lead sales to Australia and New Zealand, silver sales, by-product sales, diecast alloy sales to Asia, and Budel and Clarksville metal sales.

Business Improvement Programmes

The major components of our cost structure consist of raw materials, labour, energy costs and consumables. As a significant portion of our costs is fixed, increases in revenues from incremental production improvements contribute to higher earnings, although earnings impacts stemming from price movements are also more pronounced than would be the case for operations with a lower proportion of fixed costs. From metal contained in ore to finished metal, there are a number of processing steps at our mines and smelters and processing losses occur at each level of beneficiation. Our ability to minimise these processing losses and maximise metal recovery is a key driver to our overall profitability.

During the last three fiscal years, we have undertaken a series of projects with the objective of improving cash flow from the businesses that we operate. These projects have targeted increasing revenue, reducing costs, lowering the level of working capital employed in the business and raising the efficiency of capital investment. The results of these programmes have been a considerable improvement in the performance of the Company.

Capital Expenditures

Our business requires ongoing capital expenditure to maintain our operations, as well as undertake business improvements and expansions. Over the last three fiscal years we have focused the Company's capital expenditure spend on core sustainability projects in order to assist us in preserving cash while maintaining ongoing performance and environment, health and safety obligations during the period of voluntary administration. We recognise that while this strategy generated improved cash flows, increased levels of capital expenditure will be required in the near term to ensure that our operations are well positioned to generate the returns we expect in the future. We have identified specific areas which require near-term capital expenditure and these have been factored into the prospective financial information contained in this Institutional Offering Memorandum.

Environmental Management

Our mines and smelters operate under licences issued by governmental authorities that require that emissions meet minimum standards. Additionally, each operation when it ultimately ceases permanently will be required to be rehabilitated. We include in our operating and capital budgets allocations to ensure that our businesses can meet the environmental standards that apply to the operations today and those anticipated in the near future. In late 2002, we engaged environmental consultants, URS Australia Pty Ltd, to assist us in identifying and quantifying the material environmental issues facing our businesses. Our objective is to progressively manage these liabilities going forward. The expenditure associated with the material environmental liabilities identified during our review of environmental issues has been incorporated into our forecast cash flows and in the determination of the fair values of assets and liabilities acquired from Pasminco Limited. See discussion of "—Fair Value Accounting" below.

We have provisions in our accounts for the cost of remediation of our mining assets when they cease operations. We have not provided for environmental costs at closure of our smelters as currently there are no plans to close any of our smelters in the future. Environmental costs associated with the disposal of on site residues at our smelters have been provided for, where the expenditures are not capital in nature.

Significant Accounting Policies

Our pro forma historical financial information are prepared under Australian GAAP. A description of our significant accounting policies is included in note 1 to our pro forma historical financial information included elsewhere in this Institutional Offering Memorandum.

In applying accounting principles, we will often be required to make individual estimates and assumptions regarding expected outcomes or uncertainties. Actual results or outcomes generally differ from estimated or assumed amounts. Such differences will be included in our consolidated financial statements as soon as they are known. The individual estimates and assumptions generally do not involve a level of risk or uncertainty that would be material to our consolidated financial statements because they generally are relatively immaterial in amount.

Some of the estimates and assumptions made by management in preparing our consolidated financial statements involve matters where actual results will emerge over long periods of time. Although there is greater risk with respect to the accuracy of these long-term estimates and assumptions due to the long period of time over which actual results will emerge, our management believes that such risk is mitigated by our ability to closely monitor and periodically adjust these estimates and assumptions over the same period.

The accounting policies that our management believes are critical to understanding our financial performance or condition are discussed below.

Recoverable Amounts of Non-Current Assets

Under Australian GAAP, we are required to write down non-current assets to their estimated recoverable amount. Recoverable amounts involve significant judgements by our management and represent the net amount expected to be recovered through the cash inflows and outflows arising from its continued use and subsequent disposal. Where the carrying amount of a non-current asset is greater than its recoverable amount, the asset is written down to its recoverable amount. Where net cash inflows are derived from a group of assets working together, recoverable amount is determined on the basis of the relevant group of assets. Any decrement in the carrying amount is recognised as an expense in earnings before interest and tax in the reporting period in which the recoverable amount write-down occurs. The expected net cash flows included in determining recoverable amounts of non-current assets are discounted to their present values using a market-determined, risk-adjusted discount rate. The current rate used is 8% real.

The market value of our operations is subject to cyclical variation because of changes in internationally determined metal prices and exchange rates. Our policy is to assess the recoverable amount of non-current assets using long-term metal price and exchange rate parameters. No assets are carried in excess of their recoverable amount. This basis of valuation is consistent with the existing use of the assets to our business as a going concern. Where this assessment indicates a loss in value of our assets, an appropriate write down is made. Where the value of an asset has been fully written down to nil, all capital expenditure in connection with that asset is expensed as incurred. The discount rate used in such estimations is our estimated cost of capital calculated with reference to the nature of the business and the geographical source of the cash flows. We calculate the cash flows using forecasts of how our business is expected to operate based on the current business environment but taking into account known future changes, including strategic initiatives we have implemented, and any known external factors. Our policy is to review these cash flow projections annually to write down to their estimated recoverable amount any assets not supported by their future cash flows.

Fair Value Accounting

Under Australian GAAP, acquisitions of assets and liabilities are recorded at fair value. In connection with the restructuring to form the Zinifex group, Zinifex will acquire the companies that will make up the group and will record the assets and liabilities of these companies on the balance sheet at their fair value at the date of acquisition. The pro forma balance sheet for 31 December 2003 reports assets and liabilities of the Zinifex group at fair value as though the acquisition had occurred on that date. The fair value of an asset is the net amount expected to be recovered through future cash inflows and outflows arising from its continued use and subsequent disposal. The fair value of a liability is the net amount expected to be paid through future cash outflows. The expected net cash flows used in determining the fair values of the assets and liabilities have been discounted to their present values using a market-determined, risk-adjusted discount rate (8% real). This basis of valuation is consistent with the existing use of the assets to the business as a going concern.

Mine Development

Mine development expenditure for the initial establishment of access to mineral reserves, together with capitalised exploration, evaluation and commissioning expenditure, and financing costs on borrowings for a project prior to the commencement date of commercial production, are capitalised to the extent that the expenditure results in significant future benefits. These amounts are amortised over the current estimated economic reserve of the mine on a unit of production output basis. This calculation includes consideration of appropriate estimates of the future costs to be incurred in developing the estimated economic reserve, which includes the proven and probable reserve, plus an estimate of the economic resource within the inferred category.

The Century mine plan, based on proved and probable reserves, indicates that the Century's remaining mine life is approximately twelve years. The stripping ratio for Century is a function of the quantity of ore mined compared with the quantity of overburden, or waste, required to be removed. We expect that our stripping ratios

at Century will be higher than the stripping ratios from 2010 to the end of the life of the mine. Accordingly, we presently capitalise a portion of the mining cash costs (related to waste removal) at Century to the balance sheet and will amortise these costs over the life of the mine on a units of production basis. We expect that beyond 2010 based on the current life of mine of Century, our cash mining costs will decrease significantly as the waste stripping to access the ore is expected to be substantially reduced. See "Business – Century Mine" for an illustration of our expected stripping ratios at Century for the life of mine.

The Rosebery mine plan is based on proved and probable reserves of two years and our expectation that a portion of the inferred resources at the mine will be converted to proved and probable reserves. The Rosebery mine plan accordingly indicates that the Rosebery remaining mine life is approximately six years. Mine development costs at Rosebery are amortised over the six-year mine life on a units of production basis.

Environmental Compliance and Remedial Work

The level of the costs to be incurred by us for future compliance or remedial work or further investment, which may be necessitated by environmental laws and regulations, will be dependent upon various factors. These include, among other things, the nature and extent of the current and future environmental laws and regulations, the timing and nature of any required remedial work, the extent of any contamination, the technology available to meet the required standards, the determination of our liability in proportion to that of other parties and the extent to which any costs are recoverable from insurance and third parties.

Our management make estimates, if determinable, for our mining operations and our smelting operations of the anticipated costs that may be necessitated by environmental laws and regulations and such amounts are recorded in our consolidated financial statements.

Mining Operations

Provision is made for the anticipated costs of future restoration and rehabilitation of areas from which natural resources have been extracted. The provision includes costs associated with reclamation, plant closure, waste site closure, monitoring, demolition and decontamination. The provision is based upon current costs and has been determined by management on a discounted current cost basis with reference to the current legal framework and current technology. The restoration provision is separated into current (estimated costs arising within 12 months) and non-current components. Any change in the provision estimate is dealt with on a prospective basis.

Smelting Operations

Provision is made for the anticipated costs for future restoration and rehabilitation of smelting sites to the extent that a legal obligation exists and that the anticipated expenditure is not capital in nature. The provision includes costs associated with reclamation, monitoring, water purification and coverage and permanent storage of historical residues. The provision is based upon current costs and has been determined by management on a discounted basis with reference to the current legal framework and current technology. Any change in the provision estimate is dealt with on a prospective basis. The restoration provision is separated into current (estimated costs arising within 12 months) and non-current components.

New Accounting Standards

The revised accounting standard AASB 1020, Accounting for Income Tax (AASB 1020), is applicable to financial years beginning on or after 1 January 2005 (which, in our case, is fiscal year 2006). Under AASB 1020, for acquisitions, the seller's assets and liabilities have initially been recorded in our consolidated financial statements at fair value (which may be above their tax bases). Under the new standard, our consolidated financial statements will have to record a deferred tax liability for this increased value. When the net fair values are greater than the tax bases, a deferred tax liability will be recorded causing goodwill to be increased.

A project is being undertaken by us to consider both the ongoing impact on our consolidated financial statements and the impact on initial adoption. The transitional provisions require all previous acquisitions to be revisited where practicable.

Income Tax Position of Zinifex Limited

As at 31 December 2003, Zinifex's carried forward Australian revenue tax losses would have been in excess of A$1.8 billion if Zinifex had been formed out of the Pasminco Group as at that date. The majority of these losses are carry forward losses of Zinifex Australia Limited, Zinifex Century Limited and Zinifex Port Pirie Pty Ltd, which are companies within the Zinifex group. If the group decides to consolidate (as that term is defined for Australian tax purposes) it is likely that the value of these losses will be greatly diminished. Following the removal of the Australian tax legislation grouping provisions effective 1 July 2003, these entities are not able to transfer these losses. At this time the Zinifex group does not intend to tax consolidate under the recently enacted tax consolidation provisions and therefore the losses may only be utilised to offset taxable income of the specific entity that has the losses.

Future income tax benefits attributable to carried forward tax losses at the date of completion of this Offering will only be recognised in the consolidated accounts of Zinifex Limited to the extent that they satisfy the "virtual certainty" test pursuant to AASB 1020.

The ability of these individual entities within the Zinifex group to utilise these losses is inherently uncertain, being dependent on factors including:

- the impact of technical provisions under current Australian tax legislation that relate to the utilisation of such losses including provisions in respect of continuing the same business that the entities are currently engaged in;
- the removal of "loss grouping" under Australian tax legislation;
- a change in Australian tax legislation (or the interpretation thereof either by the Australian revenue authorities or by the Courts);
- any future decision by the directors of Zinifex group companies to elect to consolidate the Zinifex group companies in future;
- operational factors affecting the amount and timing of Australian taxable profits on revenue account; and
- investment factors, including the recognition of capital gains from the sale of assets and the size and timing of any such gains.

As a consequence of the above factors and the restructuring, the ability of these individual entities to utilise existing carried forward tax losses may be adversely affected. However, given the nature of the above factors, it is not possible to quantify in advance their likely or actual impact. For a description of our deferred tax liability, as recorded in our pro forma statement of financial position, see note 13 to our pro forma historical financial information.

Consolidated Results of Operations

Fiscal Half-Year 2004 Compared to Fiscal Half-Year 2003

Consolidated earnings before interest and tax in fiscal half year 2004 of A$11.8 million was A$8.4 million lower than consolidated earnings before interest and tax of A$20.2 million in fiscal half year 2003. The principal reason for the decrease in earnings before interest and tax in fiscal half year 2004 compared to fiscal half year 2003 was the deterioration in the Australian dollar zinc and lead metal prices resulting from the strengthening of

the Australian dollar during the six month period, whilst LME metal prices quoted in US dollars increased during the same period. Partially offsetting the adverse effects of these external factors were operational efficiency improvements emanating from the business improvement initiatives we have implemented over the course of the last three fiscal years. Also contributing to the decrease in consolidated earnings for the fiscal half year 2004 was a small increase in corporate head office costs relating to people costs due to redundancy costs arising from the outsourcing of certain sales and marketing functions.

During fiscal half year 2004, the average realised zinc metal price on net zinc metal sold was US$867 per tonne and the average realised lead metal price on net lead metal sold US$546 per tonne. These prices compared to an average realised zinc metal price on net zinc metal sold of US$764 per tonne and an average realised lead metal price on net lead metal sold of US$393 per tonne in fiscal half year 2003. Stated in Australian dollar terms, the average realised zinc metal price on net zinc metal sold in fiscal half year 2004 was A$1,269 per tonne and the average realised lead metal price on net lead metal sold in the same period was A$799 per tonne. These prices compared to an average realised zinc metal price on net zinc metal sold in fiscal half year 2003 of A$1,421 per tonne and an average lead metal price on net lead metal sold in the same period of A$731 per tonne.

In fiscal half year 2004, our mines were able to produce 287,823 tonnes of contained zinc in concentrate and 53,058 tonnes of contained lead in concentrate, compared to 307,374 tonnes of contained zinc in concentrate and 43,025 tonnes of contained lead in concentrate in fiscal half year 2003. In fiscal half year 2004, our smelters were able to produce 315,257 tonnes of zinc metal, 140,315 tonnes of lead metal and 201,910 kilograms of silver metal, compared to 309,972 tonnes of zinc metal, 137,356 tonnes of lead metal and 238,360 kilograms of silver metal in fiscal half year 2003.

Consolidated sales revenue in fiscal half year 2004 of A$775.9 million was A$49.8 million, or 6%, lower than consolidated revenue of A$825.7 million in fiscal half year 2003. In fiscal half year 2004, our net zinc metal sold was 295,326 tonnes and our net lead metal sold was 75,471 tonnes compared with 317,392 tonnes of net zinc metal sold and 54,721 tonnes of net lead metal sold in fiscal half year 2003. More than half of the zinc and lead concentrates we produce from our mines are used in our own smelters. Zinc concentrate sales volumes to external parties amounted to 175,487 tonnes in fiscal half year 2004 compared to 262,002 tonnes in fiscal half year 2003. The decrease in external sales of zinc concentrate was a result of the increased demand from our internal smelters in fiscal half year 2004. Lead concentrate sales volumes to external parties amounted to 22,389 tonnes in fiscal half year 2004 compared to zero tonnes of lead concentrate sold to external parties in fiscal half year 2003. The increase in external sales of lead concentrates in fiscal half year 2004 was a result of increased production from our Century mine.

In fiscal half year 2004 and fiscal half year 2003, we purchased more zinc and lead concentrates from external sources than we sold to external customers. As a result, in fiscal half year 2004, we had a positive net exposure to treatment charges on zinc concentrates of 82,899 tonnes on which we achieved an average treatment charge per tonne of US$119 on zinc concentrates sold and an average treatment charge per tonne on zinc concentrates purchased of US$123. In fiscal half year 2004, we had a net positive exposure to treatment charges on lead concentrates of 111,052 tonnes on which we achieved an average treatment charge per tonne of US$124 on lead concentrates sold and an average treatment charge per tonne on lead concentrates purchased of US$139. This compared with a negative net exposure to treatment charges on zinc concentrates in fiscal half year 2003 of 13,765 tonnes on which we achieved an average treatment charge per tonne of US$111 on zinc concentrates sold and an average treatment charge per tonne on zinc concentrates purchased of US$90. In fiscal half year 2003, we had a net positive exposure to treatment charges on lead concentrates in fiscal half year 2003 of 151,388 tonnes on which we achieved an average treatment charge per tonne of US$0 due to no lead concentrates being sold externally during that period, and an average treatment charge per tonne on lead concentrates purchased of US$117.

Fiscal Year 2003 Compared to Fiscal Year 2002

Consolidated loss before interest and tax in fiscal year 2003 of A$(43.8) million was A$108.8 million lower than consolidated earnings before interest and tax of A$65.0 million in fiscal year 2002. The principal reasons for

the decrease in earnings before interest and tax in fiscal year 2003 compared to fiscal year 2002 were the deterioration in zinc and lead metal prices and the depreciation of the U.S. dollar relative to the Australian dollar. Partially offsetting the adverse effects of these external factors were operational efficiency improvements emanating from the business improvement initiatives we have implemented over the course of the last three fiscal years. Also contributing to the result was a reduction in corporate head office costs reflecting lower external consulting costs associated with the smelter business improvement programme as the programme was wound down in fiscal year 2002, partially offset by an increase in people costs stemming from the introduction of an employee remuneration incentive programme.

During fiscal year 2003, the average realised zinc metal price on net zinc metal sold was US$779 per tonne and the average realised lead metal price on net lead metal sold was US$455 per tonne. These average realised metal prices compared to an average realised zinc metal price on net zinc metal sold of US$830 per tonne and an average realised lead metal price on net lead metal sold of US$529 per tonne in fiscal year 2002. Stated in Australian dollar terms, the average realised zinc metal price on net zinc metal sold in fiscal year 2003 was A$1,262 per tonne and the average realised lead metal price on net lead metal sold in the same period was A$737 per tonne. These prices compared to an average realised zinc metal price on net zinc metal sold in fiscal year 2002 of A$1,503 per tonne and an average lead metal price on net lead metal sold in the same period of A$958 per tonne.

Partially offsetting the adverse effects of the metal prices and exchange rates, was a general improvement in operating performance at our mines and smelters. In fiscal year 2003, our mines were able to produce 601,444 tonnes of contained zinc in concentrate and 91,374 tonnes of contained lead in concentrate, compared to 548,831 tonnes of contained zinc in concentrate and 112,275 tonnes of contained lead in concentrate in fiscal year 2002. In fiscal year 2003, our smelters were able to produce 618,784 tonnes of zinc metal, 285,627 tonnes of lead metal and 461,600 kilograms of silver metal, compared to 595,759 tonnes of zinc metal, 291,961 tonnes of lead metal and 431,626 kilograms of silver metal in fiscal year 2002. The overall improvement in production was the result of a company-wide business improvement initiative we undertook during the last three fiscal years, which included a number of projects designed to increase production and revenues at our sites. The segment results discussed below provide more detail regarding the performance improvements we have been able to achieve at our sites in fiscal year 2003.

Consolidated sales revenue in fiscal year 2003 of A$1,622.4 million was A$213.0 million, or 12% lower than consolidated revenue of A$1,835.4 million in fiscal year 2002. In fiscal year 2003, our net zinc metal sold was 617,160 tonnes and our net lead metal sold was 130,802 tonnes compared with 549,921 tonnes of net zinc metal sold and 121,669 tonnes of net lead metal sold in fiscal year 2002. The improvement in sales volumes primarily reflected increased production. Approximately half of the zinc and lead concentrates we produce from our mines are used in our own smelters. Zinc concentrate sales volumes to external parties amounted to 501,107 tonnes in fiscal year 2003 compared to 430,634 tonnes in fiscal year 2002. This was a direct result of increases in production levels achieved in fiscal year 2003. Lead concentrate sales volumes to external parties amounted to 5,375 tonnes in fiscal year 2003 compared to 66,354 tonnes in fiscal year 2002. In fiscal year 2002, production of lead concentrates was significantly higher due to production from stockpiled material and increased head grades achieved. Demand for internally produced lead concentrates from our Port Pirie smelter also increased in fiscal year 2002. However in fiscal year 2003, production at our mine sites returned to more normal levels and therefore lead concentrates available to the external market decreased resulting from the increased demand from our Port Pirie smelter.

In fiscal year 2003 and fiscal year 2002, we purchased more zinc and lead concentrates from external sources than we sold to external customers. As a result in fiscal year 2003, we had a positive net exposure to treatment charges on zinc concentrates of 67,636 tonnes on which we achieved an average treatment charge per tonne of US$104 on zinc concentrates sold and an average treatment charge per tonne on zinc concentrates purchased of US$127. In fiscal year 2003 we had a net positive exposure to treatment charges on lead concentrates of 275,521 tonnes on which we achieved an average treatment charge per tonne of US$80 on lead concentrates sold and an average treatment charge per tonne on lead concentrates purchased of US$115. This

compared with a positive net exposure to treatment charges on zinc concentrates in fiscal year 2002 of 158,113 tonnes on which we achieved an average treatment charge per tonne of US$127 on zinc concentrates sold and average treatment charge per tonne on zinc concentrates purchased of US$142. In fiscal year 2002 we had a net positive exposure to treatment charges on lead concentrates of 243,364 tonnes on which we achieved an average treatment charge per tonne of US$159 on lead concentrates sold and an average treatment charge per tonne on concentrates purchased of US$126.

Fiscal Year 2002 Compared to Fiscal Year 2001

Consolidated earnings before interest and tax in fiscal year 2002 of A$65.0 million was A$135.2 million lower than consolidated earnings before interest and tax of A$200.2 million in fiscal year 2001. The principal reason for the decrease in earnings before interest and tax in fiscal year 2002 compared to fiscal year 2001 was the deterioration in the zinc metal price. Partially offsetting the adverse effects of these external factors were productivity improvements achieved at the site emanating from the business improvement initiatives we have implemented over the course of the last three fiscal years. Also contributing to the result was a reduction in corporate head office costs reflecting decreased people costs following rationalisation of certain Melbourne based business activities and a reduction in depreciation following the write down of business systems implementation costs in 2001. These cost savings were partially offset by higher consulting costs associated with the smelting division Business Improvement Programme and losses on asset disposals.

During fiscal year 2002, the average realised zinc metal price on net zinc metal sold was US$830 per tonne and the average realised lead metal price on net lead metal sold US$529 per tonne. These average realised metal prices compared to an average realised zinc metal price on net zinc metal sold of US$1,038 per tonne and an average realised lead metal price on net lead metal sold of US$527 per tonne in fiscal year 2001. Stated in Australian dollar terms, the average realised zinc metal price on net zinc metal sold in fiscal year 2002 was A$1,503 per tonne and the average realised lead metal price on net lead metal sold in the same period was A$958 per tonne. These prices compared to an average realised zinc metal price on net zinc metal sold in fiscal year 2001 of A$1,943 per tonne and an average lead metal price on net lead metal sold in the same period of A$987 per tonne.

Partially offsetting the adverse effects of the metal prices and exchange rates, was a general improvement in operating performance at our mines and smelters. In fiscal year 2002, our mines were able to produce 548,831 tonnes of contained zinc in concentrate and 112,275 tonnes of contained lead in concentrate, compared to 489,560 tonnes of contained zinc in concentrate and 80,293 tonnes of contained lead in concentrate in fiscal year 2001. In fiscal year 2002, our smelters were able to produce 595,759 tonnes of zinc metal, 291,961 tonnes of lead metal and 431,626 kilograms of silver metal, compared to 599,217 tonnes of zinc metal, 232,456 tonnes of lead metal and 364,273 kilograms of silver metal in fiscal year 2001. The overall improvement in production was the result of a company-wide business improvement initiative we undertook during the last three fiscal years, which included a number of projects designed to increase production and revenues at our sites. The segment results discussed below provide more detail regarding the performance improvements we have been able to achieve at our sites in fiscal year 2002.

Consolidated sales revenue in fiscal year 2002 of A$1,835.4 million was A$29.7 million, or 2%, lower than consolidated revenue of A$1,865.1 million in fiscal year 2001. In fiscal year 2002, our net zinc metal sold was 549,921 tonnes and our net lead metal sold was 121,669 tonnes compared with 493,782 tonnes of net zinc metal sold and 80,271 tonnes of net lead metal sold in fiscal year 2001. The improvement in sales volumes primarily reflected increased production. Approximately half of the zinc and lead concentrates we produce from our mines are used in our own smelters. Zinc concentrate sales volumes to external parties amounted to 430,634 tonnes in fiscal year 2002 compared to 368,631 tonnes in fiscal year 2001. The increase in external sales of zinc concentrate was a direct result of the increased level of production achieved in fiscal year 2002. Lead concentrate sales volumes to external parties amounted to 66,354 tonnes in fiscal year 2002 compared to 72,658 tonnes in fiscal year 2001. The decrease in external sales of lead concentrates in fiscal 2002 was a result of increased demand from our Port Pirie smelter due to increased production and reduced purchases of external lead concentrates.

In fiscal year 2002 and fiscal year 2001, we purchased more zinc and lead concentrates from external sources than we sold to external customers. As a result, in fiscal year 2002, we had a positive net exposure to treatment charges on zinc concentrates of 158,113 tonnes on which we achieved an average treatment charge per tonne of US$127 on zinc concentrates sold and an average treatment charge per tonne on zinc concentrates purchased of US$142. In fiscal year 2002 we had a net positive exposure to treatment charges on lead concentrates of 243,364 tonnes on which we achieved an average treatment charge per tonne of US$159 on lead concentrates sold and an average treatment charge on per tonne on lead concentrates purchased of US$126. In fiscal year 2001 we had a positive net exposure to treatment charges on zinc concentrates of 274,341 tonnes on which we achieved an average treatment charge per tonne of US$135 on zinc concentrates sold and an average treatment charge per tonne on zinc concentrates purchased of US$146. In fiscal year 2001 we had a net positive exposure to treatment charges on lead concentrates of 230,229 tonnes on which we achieved an average treatment charge per tonne of US$190 on lead concentrates sold and an average treatment charge per tonne on lead concentrates purchased of US$127.

Segment Results of Operations

The following discussion focuses on our six main operating assets and our joint venture interest in ARA. The results of operations of these assets do not include certain corporate overheads and head office charges, which are discussed in the consolidated results of operations above. In addition, the segment discussion focuses on the operational aspects of the main operating assets of the Company. The external factors of metal prices, currency exchange rates and treatment charges have been addressed in the discussion of the consolidated results.

Fiscal Half-Year 2004 Compared to Fiscal Half-Year 2003

Century Mine

Earnings before interest and tax at Century mine increased by A$25.5 million in fiscal half year 2004 to A$38.1 million in comparison to fiscal half year 2003. The positive impact of external factors of metal price and treatment charges, partially offset by the strengthening Australian dollar, were primarily responsible for the increase in earnings before interest and tax in fiscal half year 2004.

	Fiscal Half Year		EBIT
	2004	2003	Variance
	(A$ millions)		
Revenue	238.5	233.0	5.5
Sales Realisation Expenses	(19.2)	(21.0)	1.8
Stock Movements	8.0	(18.8)	26.8
Operating Costs	(106.3)	(109.0)	2.7
Depreciation & Amortisation	(82.9)	(71.6)	(11.3)
Earnings before interest and tax	38.1	12.6	25.5

The impact of metal price, exchange rate and treatment charges on fiscal half year 2004 earnings before interest and tax versus fiscal half year 2003 is shown in the table below and is discussed in the analysis of the consolidated historical results.

	EBIT Impact
	(A$ millions)
Metal Prices	61.0
Treatment Charges	18.1
Exchange Rates	(41.6)
Total	37.5

Zinc concentrate sales volumes from Century in fiscal half year 2004 of 432,915 tonnes were 76,392 tonnes lower than volumes achieved in the prior half year representing a 15% decrease. This was primarily due to the change in Budel sales terms that saw the point of sale recognition reverting from unloading at Antwerp to the ships at Karumba. This change occurred at the beginning of fiscal year 2003 which resulted in boosted sales recognised in that period, and consequently the fiscal half year 2003. Additionally, lower production levels were achieved for contained zinc of 249,461 tonnes in the period compared with 266,918 tonnes in fiscal half year 2003. The decrease in production was a result of lower head grades and lower mill utilisation in the period.

Lead concentrate sales volumes achieved in fiscal half year 2004 from Century of 64,256 tonnes were higher in comparison to volumes achieved in the same period for the previous half year of 45,202 tonnes, representing an increase of 42%. Production of contained lead also increased in fiscal half year 2004 which were 40,582 tonnes compared to 30,527 tonnes of contained lead produced in fiscal half year 2003. Improved grades and recoveries were the drivers of the production increase.

For a summary of Century's production data refer to "Business – Century".

Sales realisation expenses incurred in fiscal half year 2004 were A$19.2 million, a decrease of 9% over the prior half year reflecting the decreased sales volumes achieved. The average selling cost per tonne of concentrate increased by A$0.75 to A$38.62 in comparison to the same period in the prior year.

Stock increased by A$8.0 million in fiscal half year 2004 primarily due to the timing of sales.

Operating costs decreased from A$109.0 million in fiscal half year 2003 to A$106.3 million in fiscal half year 2004, a fall of 2%.

Decreased production levels and the increase in the amortisation rate (discussed below) resulted in an increase in unit operating costs, including amortisation of mine development costs, of 8% to A$564.40 per tonne of contained metal produced in fiscal half year 2004 compared to A$523.79 for the same period in the previous year.

Depreciation and amortisation charged in fiscal half year 2004 rose by A$11.3 million to A$82.9 million largely due to an increase in amortisation of mining development costs. Amortisation of mine development costs was A$57.4 million, an increase of A$10.6 million. Mill throughput during fiscal half year 2004 was comparable to throughput in the same period in the prior year, however the amortisation rate per tonne milled increased as a result of an increase in forecast mining costs to the end of mine life. Write downs of deferred mine development costs recognised in fiscal half year 2004 will result in a reduction in the amortisation rate in future periods as unamortised costs brought forward will be reduced.

Rosebery Mine

Earnings before interest and tax at Rosebery Mine increased by A$4.9 million in fiscal half year 2004 to A$12.5 million. Slight increases in sales volumes reflected the continuing consolidation of improvements in operations achieved in fiscal year 2002 and 2003. The positive impact of external factors of metal price and treatment charges, largely offset by adverse movements in the exchange rates were primarily responsible for the improvement in earnings before interest and tax in the period.

	Fiscal Half Year		EBIT Variance
	2004	2003	
	(A$ millions)		
Revenue	56.0	52.9	3.1
Sales Realisation Expenses	(3.3)	(3.0)	(0.3)
Stock Movements	2.0	(1.2)	3.2
Operating Costs	(30.3)	(31.0)	0.7
Depreciation & Amortisation	(11.9)	(10.1)	(1.8)
Earnings before interest and tax	12.5	7.6	4.9

The impact of metal price, exchange rate and treatment charges on fiscal half year 2004 earnings before interest and tax versus fiscal half year 2003 is shown in the table below and is discussed in the analysis of the consolidated historical results.

	EBIT Impact (A$ millions)
Metal Prices	10.4
Treatment Charges	2.4
Exchange Rates	(8.8)
Total	4.0

Zinc concentrate sales volumes from Rosebery in fiscal half year 2004 of 69,494 tonnes were 2,098 tonnes higher than volumes achieved in the same period in the prior year. Lead concentrate sales volumes from Rosebery of 20,328 tonnes were higher by 788 tonnes than volumes achieved in fiscal half year 2003. In fiscal half year 2004, sales of copper concentrate of 3,510 tonnes were 280 tonnes higher than sales achieved in fiscal half year 2003.

Production of contained zinc from the mine in fiscal half year 2004 was 38,362 compared to 40,456 tonnes produced in fiscal half year 2003. The reduction in production volumes was mainly due to lower ore throughput resulting from a crown pillar failure in the first quarter of fiscal year 2004. This resulted in restricted access to ore for a limited period only. This restriction was not considered to be permanent and has not resulted in any change in the reserves and resources of the mine. Contained lead production in fiscal half year 2004 was 12,476 compared to 12,498 tonnes of contained lead produced in the same period in the prior year. In fiscal half year 2004, Rosebery production of contained copper was 828 tonnes compared to 663 tonnes produced in the same period in the prior year.

For a summary of Rosebery's production data refer to "Business – Rosebery".

Sales realisation expenses incurred for fiscal half year 2004 were A$3.3 million compared to A$3.0 million incurred for the fiscal half year 2003 representing an increase of 10% as a result of the increase in sales volumes achieved.

Stock increased by A$2.0 million in fiscal half year 2004 due to the timing of sales and increased stock values due to increased metal price cost of raw materials.

Operating costs in fiscal half year 2004 were A$30.3 million, a decrease of A$0.7 million compared to operating costs for the same period in the previous year.

Unit operating cost including amortisation of mine development costs but excluding depreciation, increased by 6% to A$743.24 per tonne of metal produced in fiscal half year 2004 compared to A$703.14 per tonne of metal produced in the same period in the previous year resulting from the increased amortisation of mine development costs as discussed below.

Depreciation and amortisation increased by 18% in fiscal half year 2004 to A$11.9 million. Amortisation of mine development costs was A$8.1 million an increase of A$1.4 million due to increased tonnes milled in fiscal half year 2004 and an increase in the amortisation rate as a result of a change in the estimated tonnes of ore forecast to be milled to the end of mine life.

Hobart Smelter

Earnings before interest and tax at Hobart Smelter fell by A$29.4 million in fiscal half year 2004 to a loss of A$11.4 million. Steady production and increased sales volumes of zinc metal consolidated on large increases achieved in fiscal half year 2003. Operating costs increased modestly during the half year. External factors of metal price, treatment charges and exchange rates were largely responsible for the fall in earnings before interest and tax at Hobart Smelter in fiscal half year 2004.

	Fiscal Half Year		EBIT Variance
	2004	2003	
	(A$ millions)		
Revenue	196.2	203.4	(7.2)
Sales Realisation Expenses	(19.0)	(20.9)	1.9
Stock Movements	(2.4)	5.6	(8.0)
Raw Material Costs	(113.6)	(100.4)	(13.2)
Operating Costs	(62.0)	(58.8)	(3.2)
Depreciation & Amortisation	(10.6)	(10.9)	0.3
Earnings before interest and tax	(11.4)	18.0	(29.4)

The impact of metal price, exchange rate and treatment charges on fiscal half year 2004 earnings before interest and tax versus fiscal half year 2003 is shown in the table below and is discussed in the analysis of the consolidated historical results.

	EBIT Impact
	(A$ millions)
Metal Prices	(7.8)
Treatment Charges	(3.1)
Exchange Rates	(16.6)
Total	(27.5)

Although metal prices increased during fiscal half year 2004, the timing of raw material purchases compared to metal sales more than offset these price increases in fiscal half year 2004. We are seeking to alter the terms of our raw material purchases and product sales to mitigate the negative effects of these timing differences.

Zinc metal sales volumes from Hobart in fiscal half year 2004 increased by 12% to 134,335 tonnes in comparison to 119,840 tonnes for the same period in the previous year. The increase in sales volumes achieved in fiscal half year 2004 was primarily a result of a large sale that took place in December 2003. In addition, we reduced stock in the Asian warehouses to prepare for the move to the new marketing arrangements with Trafigura. Zinc production rose marginally to 128,019 tonnes in comparison to 126,425 tonnes produced in the same period in the prior year.

In fiscal half year 2004, Hobart's average premium on zinc metal sales was US$126 per tonne compared with US$130 per tonne for the previous year. This was a result of a lower percentage of higher premium products being sold with volumes of zinc alloys representing 60% of overall zinc sales in fiscal half year 2004 compared to sales of zinc alloys representing 63% of total zinc sales in fiscal half year 2003. Sales realisation expenses decreased by A$1.9 million in fiscal half year 2004 to A$19.0 million resulting from decreased sales to higher freight cost regions in comparison to the same period in the prior year.

Stocks decreased by A$2.4 million in fiscal half year 2004 as sales exceeded production during the period and a general increase in stock value resulting from increasing metal prices and falling treatment charges, partially offset by the movements in the exchange rates.

The purchase cost of raw materials of A$113.6 million for fiscal half year 2004 was 13% higher than for the same period in the previous year. This was partly a result of slightly increased production during the half year, but mainly a result of increased metal prices and reduced treatment charge income, partially offset by movements in the exchange rate.

Operating costs increased by 5% in fiscal half year 2004 to A$62.0 million with increases recorded in people and energy cost categories in comparison to fiscal half year 2003 Unit operating costs, excluding depreciation, increased slightly by 4% to A$484.30 per tonne of metal produced in fiscal half year 2004 compared to A$465.10 for the same period in the previous year.

Depreciation and amortisation decreased in the half year to December 2003 by A$0.3 million to A$10.6 million compared to the same period in the prior financial year.

Budel Smelter (The Netherlands)

Earnings before interest and tax at Budel Smelter for fiscal half year 2004 increased by €1.5 million to €6.8 million compared to earnings before interest and tax for fiscal half year 2003. Zinc sales and production were higher in fiscal half year 2004 following the installation of additional cooling coils in the roaster allowing production temperatures to be raised increasing the efficiency of the roaster. External factors of price and US$/€ exchange rates partially offset operational gains and reduced the increase in earnings before interest and tax for fiscal half year 2004.

Earnings before interest and tax at Budel smelter stated in Australian dollars were A$11.4 million for fiscal half year 2004 compared with A$9.5 million for fiscal half year 2003.

	Fiscal Half Year		EBIT
	2004	2003	Variance
	(Euro millions)		
Revenue	106.5	94.6	11.9
Sales Realisation Expenses	(2.1)	(1.6)	(0.5)
Stock Movements	0.7	(0.2)	0.9
Raw Material Costs	(60.2)	(47.4)	(12.8)
Operating Costs	(33.7)	(35.6)	1.9
Depreciation & Amortisation	(4.4)	(4.5)	0.1
Earnings before interest and tax	6.8	5.3	1.5

The impact of price, treatment charges and exchange rate on fiscal half year 2004 earnings before interest and tax versus fiscal half year 2003 is shown in the table below and is discussed in the analysis of the consolidated historical results.

	EBIT Impact
	(Euro millions)
Metal Prices & Treatment Charges	(0.9)
Exchange Rates	(7.1)
Total	(8.0)

Zinc metal sales volumes from Budel in fiscal half year 2004 of 116,767 were 11,021 tonnes higher than in fiscal half year 2003. This increase in zinc sales tonnes stemmed from a rise in zinc metal production. Zinc metal production in fiscal half year 2004 of 114,718 tonnes was 10% higher than zinc production for the same period in the prior year of 104,125 tonnes. In fiscal year 2002 production through the roaster was stopped to allow emergency maintenance work to be performed to the dome roof of the roaster. Damage was caused following over heating

problems experienced as a result of using 100% Century concentrates. Following the completion of maintenance work, production resumed but at reduced temperatures restricting production output. Towards the end of fiscal year 2003, additional cooling coils were installed in the roaster allowing production output to increase.

In fiscal half year 2004, zinc premiums averaged US$65 per tonne compared with US$58 per tonne achieved on sales during the same period in the previous year reflecting the decreased supply of zinc in Europe following recent closures of local smelters.

Sales realisation expenses incurred in relation to zinc sales increased to €2.1 million for fiscal half year 2004 compared to €1.6 million incurred in the previous year, reflecting the increased sales volumes achieved.

Raw materials costs increased in fiscal half year 2004 by 27% to €60.2 million in comparison to the same period in the prior year. This was a result of increased concentrate volumes purchased, increased metal prices partially offset by the introduction of a base treatment charge against purchase metal price and movements in exchange rates. From July 2003, Budel charged a treatment charge against the purchase price of concentrates, the basis of this charge being an agreed base charge per dry metric tonne of concentrate purchased. Previously, Budel received an allowance against the LME metal price charged on the contained metal in concentrates purchased and therefore the allowance received fluctuated in line with LME metal price movements. From July 2003, the base charge is agreed on an annual basis in line with world terms.

Operating costs in fiscal half year 2004 fell by €1.9 million resulting from lower insurance premiums achieved and benefits from cost reduction/efficiency programmes undertaken over the previous twelve months.

Operational restrictions experienced during fiscal half year 2003 resulted in Budel's unit operating cost increasing to €341.90 per tonne of metal produced. In fiscal half year 2004 with increased production levels and benefits realised from efficiency programmes undertaken over the previous twelve months, Budel's unit operating cost fell by 14% to €293.76 per tonne of metal produced.

Depreciation and amortisation charged in fiscal half year 2004 of €4.4 million remained constant compared with the same period in the prior year.

Clarksville Smelter (United States)

Earnings before interest and tax at Clarksville fell by US$2.2 million in fiscal half year 2004 to a loss of US$2.2 million. An increase in the metal price resulted in an increase in sales revenues although offset by lower sales volumes, lower premiums and increased raw material and operating costs which resulted in reduced earnings before interest and tax.

Loss before interest and tax at Clarksville stated in Australian dollars was A$3.1 million for fiscal half year 2004 compared with a loss of A$0.1 million for fiscal half year 2003.

	Fiscal Half Year		EBIT Variance
	2004	2003	
	(US$ millions)		
Revenue	54.4	51.6	2.8
Sales Realisation Expenses	(3.8)	(4.2)	0.4
Stock Movements	0.6	2.2	(1.6)
Raw Material Costs	(29.2)	(25.7)	(3.5)
Operating Costs	(24.1)	(23.1)	(1.0)
Depreciation & Amortisation	(0.1)	(0.8)	0.7
Earnings before interest and tax	(2.2)	—	(2.2)

The impact of metal price and treatment charges on fiscal half year 2004 earnings before interest and tax versus fiscal half year 2003 is shown in the table below and is discussed in the analysis of the consolidated historical results.

	EBIT Impact (US$ millions)
Metal Prices	0.3
Treatment Charges	0.6
Total	0.9

In fiscal half year 2004 zinc metal sales volumes from Clarksville of 51,581 tonnes were 1,780 tonnes lower than sales volumes recorded in the during the same period in the prior year. Zinc metal production in fiscal half year 2004 of 51,808 tonnes was 10% lower than zinc production in fiscal half year 2003 of 57,479 tonnes. This was due to the processing of lower grade materials following the closure of Gordonsville Mine and instability with the chemical-in-leach purification.

Due to the continued effects of a weaker U.S. economy, Clarksville achieved lower average premiums on zinc sales of US$83 per tonne during fiscal half year 2004, compared with US$90 per tonne on sales during the same period in previous year.

Sales realisation expenses incurred in fiscal half year 2004 fell by 10% to US$3.8 million reflecting the lower sales volumes achieved in the half year compared to the same period in the previous year.

The purchase cost of raw materials for fiscal half year 2004 of US$29.2 million was 14% higher than costs incurred during the same period in the previous fiscal year reflecting the increased metal prices, partially offset by higher treatment charge income and increased freight costs as concentrates were sourced from mines around the world following the closure of the Gordonsville mine located a short distance from the Clarksville smelter.

Operating costs increased by 4% in fiscal half year 2004 to US$24.1 million compared to US$23.1 million incurred during the same period in the prior financial year. Following a number of production problems experienced, operating expenses at Clarksville have increased in order to stabilise production. It is expected that these costs will continue. As a result of the large drop in production volumes achieved in fiscal half year 2004 compared to the same period in the prior year, and the increase in operating costs discussed above. Unit operating costs per tonne of metal produced in fiscal half year 2004 increased by 16% to US$465.18 per tonne of metal produced compared with US$401.89 for fiscal half year 2003.

Depreciation of assets in the fiscal half year to December 2003 was US$0.1 million compared to US$0.8 million in the fiscal half year to December 2002. In fiscal year 2001, a decision was made to write the value of Clarksville assets down to nil. In subsequent years, all items of a capital nature have been initially capitalised and then depreciated fully in that year.

Port Pirie Smelter

Earnings before interest and tax at Port Pirie for fiscal half year 2004 increased by A$0.6 million to A$4.7 million compared to earnings before interest and tax for the same period in the previous year. The impact of lower sales volumes achieved in the period together with the negative impact of the strengthening Australian dollar was partially offset by external factors of metal price and treatment charges.

	Fiscal Half Year		EBIT Variance
	2004	2003	
		(A$ million)	
Revenue	216.9	235.9	(19.0)
Sales Realisation Expenses	(20.4)	(24.6)	4.2
Stock Movements	3.7	(3.1)	6.8
Raw Material Costs	(122.8)	(126.9)	4.1
Operating Costs	(67.1)	(68.8)	1.7
Depreciation & Amortisation	(5.6)	(8.4)	2.8
Earnings before interest and tax	4.7	4.1	0.6

The impact of metal price, exchange rate and treatment charges on fiscal half year 2004 earnings before interest and tax versus fiscal half year 2003 is shown in the table below and is discussed in the analysis of the consolidated historical results.

	EBIT Impact
	(A$ millions)
Metal Prices	3.7
Treatment Charges	3.5
Exchange Rates	(19.6)
Total	(12.4)

Lead metals sales volumes achieved from the smelter of 134,438 tonnes in fiscal half year 2004 were 5,000 tonnes lower compared with sales of 139,438 tonnes in the previous period. Production of lead metal of 130,504 tonnes in fiscal half year 2004 was 2% higher than production of lead metal of 128,302 recorded for the same period in the previous year. Production at the Port Pirie smelter was restricted by a scheduled blast furnace maintenance stoppage early in fiscal year 2003. No stoppage was undertaken in fiscal half year 2004, however, a reduction in production levels of lead metal was recognised due to the loss of the Cockle Creek lead bullion feed. Sales made during the scheduled stoppage period in fiscal half year 2004 were made from stocks built up in anticipation of the stoppage.

Zinc metal sales volumes from the smelter in fiscal half year 2004 of 19,319 were 3,400 tonnes lower in comparison to zinc metal sales recorded in fiscal half year 2003 of 22,719. Zinc production in fiscal half year 2004 of 20,712 tonnes was 6% lower than zinc production in fiscal half year 2003 of 21,943 tonnes due to the planned blast furnace maintenance stoppage taking place during the first quarter of fiscal year 2004.

In fiscal half year 2004, Port Pirie achieved an average premium on zinc metal sales of US$84 per tonne compared with US$74 per tonne in the previous year. Average premiums achieved on lead metal sales were US$77 per tonne for fiscal half year 2004 compared with US$56 per tonne achieved in the previous period. The increase was due to market conditions allowing improved premium rates to be negotiated with customers. The net effect of the movements in zinc and lead premiums in fiscal half year 2004 was a positive contribution to revenues.

Decreased sales volumes achieved in fiscal half year 2004 resulted in lower sales realisation expenses incurred in the period of A$20.4 million compared with A$24.6 million in fiscal half year 2003.

Stock increased by A$3.7 million in fiscal half year 2004 compared to a decrease in stocks shown during fiscal half year 2003. In fiscal half year 2003, stocks were drawn down during the production stoppage in the July 2002 to ensure sales to customers were not affected.

The purchase cost of raw materials incurred during fiscal half year 2004 of A$122.8 million was A$4.1 million lower than costs incurred in fiscal half year 2003.

Operating costs incurred for fiscal half year 2004 for Port Pirie were A$1.7 million lower at A$67.1 million than for the same period in the previous fiscal year. A small reduction in costs and an overall increase in production tonnes resulted in the unit operating costs in fiscal half year 2004 decreasing by 3% to A$443.74 per tonne of metal produced in comparison to A$457.92 in fiscal half year 2003.

Depreciation and amortisation charged in fiscal half year 2004 of A$5.6 million was A$2.8 million lower when compared to fiscal half year 2003. This was due to asset write-downs recorded in fiscal year 2003, reducing the asset base against which the depreciation charge is calculated.

Australian Refined Alloys (ARA)

Australian Refined Alloys is a joint venture in which we are an equal partner with Sims Metals. All revenues, costs, assets and liabilities are shared equally between the partners of the joint venture. Numbers reported below are our share of the joint venture.

Sales revenue reported for fiscal half year 2004 of A$8.4 million was A$0.6 million higher than fiscal half year 2003 of A$7.8 million. The higher revenue was a result of increased sales volumes achieved as well as the increase in the lead price realised in comparison to the prior period. These benefits were partially offset by the impact of the stronger Australian dollar.

Increased sales volumes were a direct result of the increase in production levels achieved in fiscal half year 2004, resulting from an increase in the availability of feedstocks of recycled lead acid batteries.

Earnings before interest and tax of A$1.3 million for fiscal half year 2004 was A$0.3 million higher than earnings before interest and tax of A$1.0 million for fiscal half year 2003. As discussed above, sales revenue reported for fiscal half year 2004 was higher but additionally higher operating costs with the cost of materials increasing limited the increase in earnings before interest and tax when compared with fiscal half year 2003.

Fiscal Year 2003 Compared to Fiscal Year 2002

Century Mine

Earnings before interest and tax at Century fell by A$42.1 million in fiscal year 2003 to a loss of A$9.1 million in comparison to the prior year. Significantly increased zinc concentrate production led to increased sales of zinc concentrate. However the reduction in production and sales of lead concentrates and an increase in operating costs as well as external factors of metal price and exchange rate, resulted in a drop in earnings before interest and tax in fiscal year 2003 at Century.

	Fiscal Year		EBIT Variance
	2003	2002	
	(A$ millions)		
Revenue	416.7	373.5	43.2
Sales Realisation Expenses	(44.0)	(42.5)	(1.5)
Stock Movements	(20.4)	20.2	(40.6)
Operating Costs	(217.8)	(178.6)	(39.2)
Depreciation & Amortisation	(143.6)	(139.6)	(4.0)
Earnings before interest and tax	(9.1)	33.0	(42.1)

The impact of metal price, exchange rate and treatment charges on fiscal year 2003 earnings before interest and tax versus fiscal year 2002 is shown in the table below and is discussed in the analysis of the consolidated historical results.

	EBIT Impact
Metal Prices	(7.6)
Treatment Charges	23.2
Exchange Rates	(30.2)
Total	(14.6)

Zinc concentrate sales volumes from Century in fiscal year 2003 of 946,714 tonnes were 178,512 tonnes higher than volumes achieved in the prior fiscal year representing a 23% increase. This was largely due to higher production levels achieved for contained zinc of 520,327 tonnes in fiscal year 2003 compared with 470,706 tonnes in fiscal year 2002. The increase in production was a result of higher grades, increased ore throughput and improved recovery rates of contained zinc metal as Century exceeded design capacity for the first time during fiscal year 2003. Timing of shipments also contributed to the increase in sales volumes in fiscal year 2003 compared to fiscal year 2002.

Lead concentrate sales volumes achieved in fiscal year 2003 from Century of 97,745 tonnes fell in comparison to volumes achieved in the previous year by 43,503 tonnes representing a decrease of 31%. Production of contained lead also decreased in fiscal year 2003 to 65,020 tonnes from 88,322 tonnes in fiscal year 2002. Sales fell in line with production, which in fiscal year 2002 was boosted through the draw down of stockpiled material, as discussed in fiscal year 2002 compared to fiscal year 2001.

For a summary of Century's production data refer to "Business – Century".

Sales realisation expenses incurred for fiscal year 2003 were A$44.0 million, an increase of 4% over the previous year reflecting the increased zinc sales volumes achieved. The average selling cost per tonne of concentrate fell by 10% to A$42.13 in comparison to the prior year as a result of reduced freight rates achieved and a cost per tonne reduction achieved as a result of increased sales volumes against fixed realisation expenses incurred in relation to the operation of the port and the transport pipeline.

Stock decreased by A$20.4 million in fiscal year 2003 primarily due to the timing of sales.

Operating costs increased from A$178.6 million in fiscal year 2002 to A$217.8 million in fiscal year 2003, a rise of 22%. Energy costs contributed A$13.7 million of the increase due to diesel prices rising and the purchase of consignment stocks. External services and other operating expenses increased as a result of higher contractor rates charged, additional insurance premiums incurred and an increase in the environmental rehabilitation provision following an external review.

Increased operating costs and amortisation of mine development costs resulted in a rise in the unit operating cost per tonne of contained metal produced of 15% to A$528.40 in fiscal year 2003 compared to A$460.62 per tonne of contained metal produced in fiscal year 2002.

Depreciation and amortisation charged in fiscal year 2003 rose by A$4.0 million to A$143.6 million due to increased production levels achieved in the year. Amortisation of mine development was A$91.5 million, an increase of A$12.6 million reflecting increased production levels reached in the year.

Rosebery Mine

Earnings before interest and tax at Rosebery Mine increased by A$5.8 million in fiscal year 2003 to A$10.2 million. Increased concentrate production enabled increased sales of concentrate while operating costs before write-downs and provisions were only marginally increased during the year.

	Fiscal Year		EBIT Variance
	2003	2002	
	(A$ millions)		
Revenue	98.3	99.0	(0.7)
Sales Realisation Expenses	(6.3)	(6.6)	0.3
Stock Movements	(2.6)	1.4	(4.0)
Operating Costs	(58.8)	(68.6)	9.8
Depreciation & Amortisation	(20.4)	(20.8)	0.4
Earnings before interest and tax	10.2	4.4	5.8

The impact of metal price, exchange rate and treatment charges on fiscal year 2003 earnings before interest and tax versus fiscal year 2002 is shown in the table below and is discussed in detail in the analysis of the consolidated historical results.

	EBIT Impact
	(A$ millions)
Metal Prices	(0.3)
Treatment Charges	6.9
Exchange Rates	(8.0)
Total	(1.4)

Zinc concentrate sales volumes from Rosebery in fiscal year 2003 of 141,399 tonnes were 1,627 tonnes higher than volumes achieved in the prior fiscal year. Lead concentrate sales volumes from Rosebery of 49,933 tonnes were higher by 16,340 tonnes than volumes achieved in fiscal year 2002. In fiscal year 2003, sales of copper concentrate of 6,925 tonnes were 1,545 tonnes higher than sales achieved in fiscal year 2002.

In fiscal year 2003 contained zinc production was 81,117 tonnes compared with 78,125 tonnes in fiscal year 2002 representing an increase of 4%. In fiscal year 2003 contained lead production was 26,354 tonnes compared with 23,953 tonnes in fiscal year 2002 representing a increase of 10%. In fiscal year 2003 production of contained copper increased by 18% to 1,456 tonnes in comparison to 1,239 tonnes in the prior fiscal year. Increases in sales and production resulted from improved work practices implemented at the mine during fiscal year 2002 in addition to higher ore grades achieved, increased ore throughput and better recovery of contained metal achieved.

For a summary of Rosebery's production data refer to "Business – Rosebery Mine".

Sales realisation expenses incurred for fiscal year 2003 were A$6.3 million compared to A$6.6 million incurred for fiscal year 2002, representing a reduction of 5% reflecting reduced freight rates achieved.

Stock decreased by A$2.6 million in fiscal year 2003 primarily due to the timing of sales.

Operating costs in fiscal year 2003 were A$58.8 million, a decrease of A$9.8 million compared to the previous year. Included in operating costs in fiscal year 2002 was a loss of A$5.5 million relating to the write off of the book value attributable to the redundant mine shaft and equipment which became obsolete following the construction of a decline from the surface, and an increase in the environmental rehabilitation provision of A$5.9 million. Excluding these amounts included in fiscal year 2002, operating costs increased modestly in fiscal year 2003.

As a result of increased production and steady operating expenses, unit operating cost, including amortisation of mine development costs but excluding depreciation charges, fell by 3% to A$663.75 per tonne of metal produced in fiscal year 2003 compared to A$686.24 in the previous year.

Depreciation and amortisation was relatively flat in fiscal year 2003 at A$20.4 million compared to fiscal year 2002. Amortisation of mine development costs was A$13.5 million a decrease of A$0.2 million.

Hobart Smelter

Earnings before interest and tax at Hobart Smelter fell by A$49.5 million in fiscal year 2003 to A$6.9 million. Steady production and a marginal decrease in sales of zinc metal consolidated on large volume increases achieved in fiscal year 2002. Operating costs increased modestly during the year reflecting the modest increase in production volumes achieved. However, external factors of metal price, treatment charges and exchange rates were largely responsible for the fall in earnings before interest and tax at Hobart Smelter in fiscal year 2003.

	Fiscal Year		EBIT Variance
	2003	2002	
		(A$ millions)	
Revenue	402.2	475.5	(73.3)
Sales Realisation Expenses	(43.3)	(41.5)	(1.8)
Stock Movements	(5.1)	(20.1)	15.0
Raw Material Costs	(208.0)	(214.0)	6.0
Operating Costs	(117.7)	(117.0)	(0.7)
Depreciation & Amortisation	(21.2)	(26.5)	5.3
Earnings before interest and tax	6.9	56.4	(49.5)

The impact of metal price, exchange rate and treatment charges on fiscal year 2003 earnings before interest and tax versus fiscal year 2002 is shown in the table below and is discussed in the analysis of the consolidated historical results.

	EBIT Impact
	(A$ millions)
Metal Prices	(7.7)
Treatment Charges	(33.6)
Exchange Rates	(24.5)
Total	(65.8)

Zinc metal sales volumes from Hobart in fiscal year 2003 were steady at 252,744 tonnes in comparison to 256,342 tonnes for the previous fiscal year, representing a decrease of 1%. Zinc production rose marginally to 253,434 tonnes in comparison to 251,819 tonnes produced in the prior financial year.

In fiscal year 2003, Hobart's average premium on zinc metal sales was US$133 per tonne compared with US$123 per tonne for the previous year. This was a result of higher volumes of higher premium product being sold in fiscal year 2003 in comparison to the previous year.

Sales realisation expenses rose by A$1.8 million in fiscal year 2003 to A$43.3 million resulting from increased sales to higher freight cost regions in comparison to the prior year.

The cost of raw materials of A$208.0 million for fiscal year 2003 was 3% lower than for the previous year. This was mainly a result of external factors as discussed above.

Operating costs held steady in fiscal year 2003 at A$117.7 million. Resulting from steady costs and production in fiscal year 2003 in comparison to the prior year, unit operating costs, excluding depreciation and amortisation, remained flat at A$464.42 per tonne of metal produced in fiscal year 2003 compared to A$464.62 in the previous year.

Depreciation and amortisation decreased in fiscal year 2003 by A$5.3 million to A$21.2 million as a number of items of plant and equipment were fully written down in fiscal year 2002.

Budel Smelter (The Netherlands)

Earnings before interest and tax at Budel Smelter fell by €5.7 million in fiscal year 2003 to €6.5 million. Zinc metal sales and production in fiscal year 2003 returned to normal levels after Budel's zinc metal production was adversely impacted by an unplanned roaster shutdown resulting from overheating problems experienced in fiscal year 2002. External factors of metal price and exchange rates more than offset productivity improvements and contributed to the lower earnings before interest and tax result for the year.

Earnings before interest and tax at Budel smelter stated in Australian dollars were A$11.9 million for fiscal year 2003 compared with A$20.8 million for fiscal year 2002.

	Fiscal Year		EBIT Variance
	2003	2002	
	(Euro million)		
Revenue	190.8	205.4	(14.6)
Sales Realisation Expenses	(3.6)	(4.5)	0.9
Stock Movements	(1.6)	1.2	(2.8)
Raw Material Costs	(95.3)	(107.5)	12.2
Operating Costs	(74.7)	(73.2)	(1.5)
Depreciation & Amortisation	(9.1)	(9.2)	0.1
Earnings before interest and tax	6.5	12.2	(5.7)

The impact of metal price and exchange rate on fiscal year 2003 earnings before interest and tax versus fiscal year 2002 is shown in the table below and is discussed in detail in the analysis of the consolidated historical results.

	EBIT Impact
	(Euro millions)
Metal Prices	(0.2)
Exchange Rates	(16.2)
Total	(16.4)

In fiscal years 2002 and 2003, Budel did not charge a treatment charge against purchases of concentrate materials. The allowance charged in lieu of a treatment charge was directly linked to the LME price and therefore any variance in this charge has been analysed as a metal price variance. As a result no treatment charge variance was recorded for Budel in fiscal year 2003.

Zinc metal sales volumes from Budel in fiscal year 2003 of 219,839 were 17,826 tonnes higher than in fiscal year 2002. This increase in zinc sales tonnes stemmed from a rise in zinc metal production. Zinc metal production in fiscal year 2003 of 212,194 tonnes was 10% higher than zinc production in the prior fiscal year of 193,566 tonnes. Production returned to near normal levels in fiscal year 2003 after roaster overheating problems were addressed in the previous year. Additional heat produced by roasting 100% Century concentrate was found to have damaged the roasters requiring repairs to the roaster dome roof to enable production to return to near normal levels at reduced temperatures. Additional cooling coils were installed towards the end of fiscal year 2003.

In fiscal year 2003, zinc premiums averaged US$65 per tonne compared with US$62 per tonne achieved on sales in the previous year reflecting a similar low level of demand for zinc in Europe as economic activity remained flat.

Sales realisation expenses incurred decreased by €0.9 million to €3.6 million for fiscal year 2003. Although sales volumes increased significantly in fiscal year 2003, overall freight rates achieved were lower resulting from increased sales in The Netherlands or neighbouring regions carrying lower freight costs.

Raw materials costs fell by 11% to €95.3 million in comparison to the prior year as a result of lower metal prices partially offset by increased purchases as production returned to normal levels.

Operating costs in fiscal year 2003 rose by €1.5 million mainly due to energy prices increasing. Budel's electricity contract is partially linked to the price of oil and coal, which were more expensive in fiscal year 2003.

Operational restrictions experienced during fiscal year 2002 resulted in Budel's unit operating cost increasing to €378.17 per tonne of metal produced. In fiscal year 2003 with the production levels returning to normal, Budel's unit operating cost fell by 7% to €352.04 per tonne of metal produced.

Depreciation and amortisation charged in fiscal year 2003 of €9.1 million remained constant compared with the prior year.

Clarksville Smelter (USA)

Earnings before interest and tax at Clarksville fell by US$7.1 million in fiscal year 2003 to a loss of US$4.6 million. Zinc sales and production fell slightly during fiscal year 2003 and premium levels achieved were lower than in the prior year with the effect of reducing revenue, while operating costs increased and external factors of metal price and treatment charges negatively impacted earnings before interest and tax achieved for fiscal year 2003.

The loss before interest and tax at Clarksville stated in Australian dollars was A$6.9 million for fiscal year 2003 compared with earnings before interest and tax of A$4.8 million for fiscal year 2002.

	Fiscal Year		EBIT
	2003	2002	Variance
	(US$ million)		
Revenue	105.5	108.9	(3.4)
Sales Realisation Expenses	(7.6)	(7.7)	0.1
Stock Movements	1.1	1.0	0.1
Raw Material Costs	(54.0)	(52.6)	(1.4)
Operating Costs	(47.6)	(45.7)	(1.9)
Depreciation & Amortisation	(2.0)	(1.4)	(0.6)
Earnings before interest and tax	(4.6)	2.5	(7.1)

The impact of price and treatment charges on fiscal year 2003 earnings before interest and tax versus fiscal year 2002 is shown in the table below and is discussed in the analysis of the consolidated historical results.

	EBIT Impact
	(US$ millions)
Metal Prices	(2.2)
Treatment Charges	(4.4)
Total	(6.6)

In fiscal year 2003 zinc metal sales volumes from Clarksville of 109,845 tonnes were 730 tonnes lower than sales volumes recorded in fiscal year 2002. Zinc metal production in fiscal year 2003 of 110,249 tonnes was 485 tonnes higher than zinc metal production in the previous year of 109,764 tonnes.

Due to the continuing effects of a weaker U.S. economy, Clarksville achieved lower average premiums on zinc sales of US$82 per tonne during fiscal year 2003, compared with US$93 per tonne for the previous fiscal year.

Sales realisation expenses incurred in fiscal year 2003 fell by 1% to US$7.6 million, reflecting the lower level of sales achieved in the year compared to the previous fiscal year.

The purchase cost of raw materials for fiscal year 2003 of US$54.0 million was 3% higher than in the previous fiscal year reflecting the reduction in treatment charge income in comparison to the prior year.

Operating costs increased by 4% in fiscal year 2003 to US$47.6 million compared to the prior year. As a result of lower production achieved in the year with no cost reduction, unit operating costs per tonne of metal produced, excluding depreciation and amortisation, in fiscal year 2003 increased by 4% to US$431.75 compared with US$416.35 per tonne of metal produced in fiscal year 2002.

Depreciation and amortisation charged in fiscal year 2003 of US$2.0 million was US$0.6 million higher than in the prior year. In fiscal year 2001, a decision was made to write the value of the Clarksville assets down to nil. In subsequent years, all items of a capital nature have been initially capitalised and then depreciated fully in that year. In fiscal year 2003 capital items depreciated amounted to US$2.0 million

Port Pirie Smelter

Earnings before interest and tax at Port Pirie Smelter fell by A$22.6 million to A$4.1 million in fiscal year 2003. Significantly increased lead sales followed a stable production year. Operating costs increased primarily due to a scheduled maintenance stoppage in fiscal year 2003. However, external factors of treatment charges and exchange rates negatively impacted earnings before interest and tax more than offsetting productivity improvements made.

	Fiscal Year		
	2003	2002	Variance
		(A$ millions)	
Revenue	464.2	474.0	(9.8)
Sales Realisation Expenses	(43.1)	(45.5)	2.4
Stock Movements	(30.9)	22.7	(53.6)
Raw Material Costs	(234.1)	(269.9)	35.8
Operating Costs	(134.7)	(129.5)	(5.2)
Depreciation & Amortisation	(17.3)	(25.1)	7.8
Earnings before interest and tax	4.1	26.7	(22.6)

The impact of metal price, exchange rate and treatment charges on fiscal year 2003 earnings before interest and tax versus fiscal year 2002 is shown in the table below and is discussed in detail in the analysis of the consolidated historical results.

	EBIT Impact
	(A$ millions)
Metal Prices	1.1
Treatment Charges	(21.7)
Exchange Rates	(16.9)
Total	(37.5)

Lead metals sales volumes achieved from the smelter of 282,999 tonnes in fiscal year 2003 were 28,115 tonnes higher or an 11% increase compared with sales of 254,884 tonnes in the previous fiscal year. Production of lead metal of 267,484 tonnes in fiscal year 2003 was 3% lower than production of lead metal recorded for the previous year. Production at the Port Pirie smelter was restricted by a scheduled blast furnace maintenance stoppage early in fiscal year 2003. No stoppage was undertaken the year before. Stocks of lead finished product were built up at the end of fiscal year 2002 in order to maintain sales throughout the scheduled stoppage of the blast furnace. Consequently sales volumes achieved in fiscal year 2003 were greater than production volumes in that year.

Zinc metal sales volumes from the smelter in fiscal year 2003 of 44,829 were 8,759 tonnes or 24% higher in comparison to zinc metal sales recorded in fiscal year 2002. Zinc production in fiscal year 2003 of 42,967 tonnes was 6% higher than zinc production in fiscal year 2002 of 40,609 tonnes. Zinc production gains continued to accrue from the business improvement programme started the year before.

In fiscal year 2003, Port Pirie achieved an average premium on zinc metal sales of US$75 per tonne compared with US$76 per tonne in the previous year. Average premiums achieved on lead metal sales were US$60 per tonne for fiscal year 2003 compared with US$72 per tonne achieved in the previous year resulting in lower revenues achieved. The decrease was due to additional lead sales being placed in lower return markets resulting in lower average premiums achieved. The net effect of the movements in zinc and lead premiums in fiscal year 2003 resulted in an overall reduction in revenues.

Despite an increase in sales volumes achieved in fiscal year 2003, sales realisation expenses incurred in the year decreased by 5% to A$43.1 million compared with the prior year. This was a result of increased output and more bulk shipments enabling improved freight rates to be achieved.

Stock decreased by A$30.9 million in fiscal year 2003 reflecting the planned draw down of inventory to ensure sales were not interrupted during the scheduled maintenance stop. In fiscal year 2002 stocks of finished product were built up to ensure sales levels could be maintained during the scheduled blast furnace stoppage at the beginning of fiscal year 2003.

The purchase cost of raw materials incurred during fiscal year 2003 of A$234.1 million was A$35.8 million lower than costs incurred in the prior fiscal year. This was due to a reduction in materials sourced as a result of the scheduled maintenance shutdown of the blast furnace early in the year, partially offset by a reduction in treatment charge income.

Operating costs incurred for fiscal year 2003 for Port Pirie were A$5.2 million higher at A$134.7 million than for the previous fiscal year. Included in the operating costs for fiscal year 2002 was a loss of A$6.9 million for disposal of assets. Excluding this item, operating costs in fiscal year 2003 increased by A$12.1 million in comparison to fiscal year 2002 primarily due to the costs associated with the planned maintenance stoppage of the blast furnace.

As a result of the decreased production volumes achieved in fiscal year 2003 due to the planned stoppage, unit operating costs, excluding depreciation and amortisation, increased by 6% to A$433.88 per tonne of metal produced compared to A$410.30 per tonne of metal produced in the previous year.

Depreciation and amortisation charged in fiscal year 2003 of A$17.3 million was A$7.8 million lower when compared to fiscal year 2002. This was due to asset write-downs recorded in fiscal year 2002, resulting in a reduced depreciation charge calculated in fiscal year 2003.

Australian Refined Alloys (ARA)

Numbers reported below are our share of the joint venture.

Sales revenue reported for fiscal year 2003 of A$16.0 million was A$1.7 million or 10% lower than sales revenue for the previous fiscal year of A$17.7 million. The reduction in revenues earned was a result of both the reduction in the realised lead price in fiscal year 2003 in comparison to the prior year, and the effects of the stronger Australian dollar. This was partially offset by increased sales volumes achieved.

An increase in production levels achieved in fiscal year 2003 was a result of a significant increase in the availability of feedstocks of recycled lead acid batteries.

Earnings before interest and tax of A$1.4 million for fiscal year 2003 was A$3.0 million lower than the earnings before interest and tax reported for the previous fiscal year of A$4.4 million. As discussed above, sales revenue reported for fiscal year 2003 was lower and, additionally, higher operating costs due to increased cost of materials contributed to the reduction in earnings before interest and tax when compared with the previous fiscal year.

Fiscal Year 2002 Compared to Fiscal Year 2001

Century Mine

Earnings before interest and tax at Century fell by A$23.1 million in fiscal year 2002 to A$33.0 million in comparison to A$56.1 million in fiscal year 2001. Significantly increased concentrate production resulted in higher sales of concentrate while operating cost per unit produced reduced during the year. However external factors of metal price and treatment charges more than offset the benefits of productivity improvements made at Century.

	Fiscal Year		EBIT Variance
	2002	2001	
	(A$ millions)		
Revenue	373.5	427.6	(54.1)
Sales Realisation Expenses	(42.5)	(40.8)	(1.7)
Stock Movements	20.2	(14.5)	34.7
Operating Costs	(178.6)	(158.5)	(20.1)
Depreciation & Amortisation	(139.6)	(157.7)	18.1
Earnings before interest and tax	33.0	56.1	(23.1)

The impact of metal price, exchange rate and treatment charges on fiscal year 2002 earnings before interest and tax versus fiscal year 2001 is shown in the table below and is discussed in the analysis of the consolidated historical results.

	EBIT Impact
	(A$ millions)
Metal Prices	(130.9)
Treatment Charges	(25.4)
Exchange Rates	18.3
Total	(138.0)

Zinc concentrate sales volumes from Century in fiscal year 2002 of 768,202 tonnes were 20,357 tonnes higher than volumes achieved in the prior fiscal year, representing a 3% increase. This was due to higher production levels achieved for contained zinc of 470,706 tonnes in fiscal year 2002 compared with 416,880 tonnes in fiscal year 2001. The increase in production was a result of higher grades, increased ore throughput and improved recovery rates of contained zinc metal as Century continued to ramp up production through the concentrator to design capacity.

Lead concentrate sales volumes achieved in fiscal year 2002 from Century of 141,248 were greater in comparison to volumes achieved in the previous year by 69,532 tonnes representing an increase of 97%. The increase in sales volumes achieved in fiscal year 2002 partially resulted from the sale of stocks built up at the end of the prior year as well as increased production in fiscal year 2002. Century production of contained lead in concentrate increased in fiscal year 2002 by 65% from 53,770 tonnes in fiscal year 2001 to 88,322 tonnes of contained metal primarily as a result of the recovery of lead concentrate previously set aside while efforts focussed on increasing throughput of zinc concentrate and improvements to recovery rates in the mill.

For a summary of Century's production data refer to "Business – Century Mine".

Sales realisation expenses incurred for fiscal year 2002 were A$42.5 million, an increase of 4% over A$40.8 million incurred during fiscal year 2001 reflecting increased sales volumes, partially offset by increased cost efficiencies. The average selling cost per tonne of concentrate fell by A$3.05 to A$46.73 in comparison to the prior year.

Stock increased by A$20.2 million in fiscal year 2002 due to the timing of sales.

Operating costs increased 13% from A$158.5 million in fiscal year 2001 to A$178.6 million in fiscal year 2002, reflecting increased production levels reached. Resulting from increased production and the decrease in amortisation of mine development costs in fiscal year 2002, as discussed below, the operating costs per tonne of contained metal produced fell by 15% to A$460.62 in fiscal year 2002 compared to A$542.44 in the previous year.

Depreciation and amortisation reduced in fiscal year 2002 by A$18.1 million to A$139.6 million. As discussed above, amortisation of mine development costs in fiscal year 2002 was A$78.9 million, a decrease of A$17.9 million in comparison to the prior year. This was a result of a write down of deferred mine development costs made in fiscal year 2001, partially offset by an increase in amortisation due to a six-month reduction in the mine life from a life of mine study and the increased level of tonnes milled.

Rosebery Mine

Earnings before interest and tax at Rosebery Mine fell by A$25.4 million in fiscal year 2002 to A$4.4 million. Increased zinc concentrate production enabled increased sales volumes of zinc concentrate while operating costs (before write-downs and provisions) were held steady during the year. However, lower levels of sales achieved for both lead and copper concentrates resulting from reductions in production, higher operating costs incurred and external factors of metal price and exchange rates more than offset the benefits of productivity improvements in relation to zinc concentrates made at Rosebery.

	Fiscal Year		EBIT
	2002	2001	Variance
	(A$ millions)		
Revenue	99.0	112.3	(13.3)
Sales Realisation Expenses	(6.6)	(6.4)	(0.2)
Stock Movements	1.4	(4.9)	6.3
Operating Costs	(68.6)	(53.5)	(15.1)
Depreciation & Amortisation	(20.8)	(17.7)	(3.1)
Earnings before interest and tax	4.4	29.8	(25.4)

The impact of metal price, exchange rate and treatment charges on fiscal year 2002 earnings before interest and tax versus fiscal year 2001 is shown in the table below and is discussed in the analysis of the consolidated historical results.

	EBIT Impact (A$ millions)
Metal Prices	(1.2)
Treatment Charges	1.7
Exchange Rates	2.1
Total	2.6

Zinc concentrates sales volumes from Rosebery in fiscal year 2002 of 139,772 tonnes were 11,932 tonnes or 9% higher than volumes achieved in the prior fiscal year. Lead concentrate sales volumes from Rosebery of 33,593 tonnes were lower by 6,377 tonnes or 16% than volumes achieved in fiscal year 2001. In fiscal year 2002, sales of copper concentrate of 5,400 tonnes were 1,193 tonnes or 18% lower than sales achieved in fiscal year 2001. Changes in sales volumes achieved in fiscal year 2002 reflected changes in production volumes.

In fiscal year 2002 contained zinc production was 78,125 tonnes compared with 72,680 tonnes in fiscal year 2001 representing an increase of 7%. In fiscal year 2002 contained lead production was 23,953 tonnes compared with 26,523 tonnes in fiscal year 2001 representing a decrease of 10%. In fiscal year 2002 production of contained copper fell by 18% to 1,239 tonnes in comparison to 1,507 tonnes produced in the prior fiscal year. The change in production volumes was largely driven by ore grade, although increased ore throughput and better recovery of contained metal were achieved.

For a summary of Rosebery's production data refer to "Business – Rosebery Mine".

Stock increased by A$1.4 million in fiscal year 2002 due to the timing of sales.

Operating costs in fiscal year 2002 of A$68.6 million, an increase of A$15.1 million over the previous year, were adversely affected by a loss of A$5.5 million relating to the write down in value of the mine shaft and mining equipment which became obsolete following the construction of a decline from surface, a provision recognised of A$5.9 million for environmental rehabilitation expenses and costs of A$4.0 million incurred for the construction of the decline from surface. The cost of the decline was partially expensed in fiscal year 2002 as it enabled access to ore mined close to surface. Royalties fell by A$3.3 million in fiscal year 2002 over the previous year due to the fall in revenue and earnings before interest and tax. Otherwise operating costs for fiscal year 2002 were held steady in comparison to the same costs recorded for the previous year and include an A$2.2 million cost for redundancies arising from changes to work practices made in fiscal year 2002.

The underlying operating cost per tonne of contained metal produced including amortisation but excluding depreciation and the assets scrapping and provision discussed above, increased by 5% to A$686.24 in fiscal year 2002 compared to A$654.35 in the previous year. This was mainly due to the additional costs incurred and expensed in relation to the construction of the decline from surface.

Depreciation and amortisation increased in fiscal year 2002 by A$3.1 million to A$20.8 million resulting from the increased levels of production achieved in the year. Amortisation of mine development costs was A$13.7 million, an increase of A$1.3 million in comparison to the prior financial year.

Hobart Smelter

Earnings before interest and tax at Hobart Smelter fell by A$24.4 million in fiscal year 2002 to A$56.4 million. Significantly increased zinc production resulted in increased sales of zinc while operating costs were held steady during the year. However external factors of metal price and treatment charges more than offset the benefits of productivity improvements made at Hobart Smelter.

	Fiscal Year		EBIT Variance
	2002	2001	
		(A$ millions)	
Revenue	475.5	477.0	(1.5)
Sales Realisation Expenses	(41.5)	(37.6)	(3.9)
Stock Movements	(20.1)	10.8	(30.9)
Raw Material Costs	(214.0)	(228.6)	14.6
Operating Costs	(117.0)	(114.2)	(2.8)
Depreciation & Amortisation	(26.5)	(26.6)	0.1
Earnings before interest and tax	56.4	80.8	(24.4)

The impact of metal price, exchange rate and treatment charges on fiscal year 2002 earnings before interest and tax versus fiscal year 2001 is shown in the table below and is discussed in the analysis of the consolidated historical results.

	EBIT Impact
	(A$ millions)
Metal Prices	(25.8)
Treatment Charges	(9.4)
Exchange Rates	28.7
Total	(6.5)

Zinc metal sales volumes from Hobart in fiscal year 2002 were higher at 256,342 tonnes in comparison to 233,698 tonnes for the previous fiscal year, representing an increase of 10%. The additional sales were as a result of increased zinc production, which rose by 8% to 251,819 tonnes in comparison to 233,074 tonnes produced in the prior fiscal year. The substantial improvement in zinc metal produced is an outcome of productivity programmes at the Hobart smelter.

In fiscal year 2002, Hobart's average zinc premium on zinc metal sales was US$123 per tonne compared with US$132 per tonne for the previous fiscal year. This was a result of lower volumes of high premium product being sold in fiscal year 2002 in comparison to the previous fiscal year.

Sales realisation expenses rose by A$3.9 million in fiscal year 2002 to A$41.5 million in line with the increased sales volumes achieved.

Stock decreased by A$20.1 million in fiscal year 2002 reflecting reduced stock levels as sales volumes exceeded production.

The purchase cost of raw materials of A$214.0 million for fiscal year 2002 was 6% lower than for the previous year. This was mainly a result of the reduction in metal prices during fiscal year 2002 with smelter treatment charge income remaining at a similar level to the prior year.

Operating costs were steady in fiscal year 2002 at A$117.0 million. Energy costs rose in line with the increased production in fiscal year 2002, however this was largely offset by cost reductions in other areas. The production increase (delivered at constant operating expenses) has lowered unit operating costs by 5% to A$464.62 per tonne of metal produced in fiscal year 2002 compared to A$489.97 in the previous year.

Depreciation and amortisation decreased in fiscal year 2002 by A$0.1 million to A$26.5 million.

Budel Smelter (The Netherlands)

Earnings before interest and tax at Budel Smelter fell by €32.9 million in fiscal year 2002 to €12.2 million. Operationally, roaster problems arising from the greater levels of heat produced by Century concentrates adversely impacted Budel's zinc production. External factors of metal price also significantly contributed to the lower earnings before interest and tax result for the year.

Earnings before interest and tax at Budel smelter stated in Australian dollars were A$20.8 million for fiscal year 2002 compared with A$74.5 million for fiscal year 2001.

	Fiscal Year		EBIT Variance
	2002	2001	
	(Euro millions)		
Revenue	205.4	295.6	(90.2)
Sales Realisation Expenses	(4.5)	(4.8)	0.3
Stock Movements	1.2	0.4	0.8
Raw Material Costs	(107.5)	(156.7)	49.2
Operating Costs	(73.2)	(80.1)	6.9
Depreciation & Amortisation	(9.2)	(9.3)	0.1
Earnings before interest and tax	12.2	45.1	(32.9)

The impact of metal price, exchange rate and treatment charges on fiscal year 2002 earnings before interest and tax versus fiscal year 2001 is shown in the table below and is discussed in the analysis of the consolidated historical results. In fiscal years 2001 and 2002, Budel did not charge a treatment charge against purchases of concentrate materials. The allowance charged in lieu of a treatment charge was directly linked to the LME price and therefore any variance in this charge has been analysed as a metal price variance.

	EBIT Impact
	(Euro millions)
Metal Prices	(8.9)
Exchange Rates	1.7
Total	(7.2)

Zinc metal sales volumes from Budel in fiscal year 2002 of 202,013 were 17,826 tonnes lower than in fiscal year 2001. The decrease in zinc sales volumes achieved stemmed from the decrease in zinc metal production. Zinc metal production in fiscal year 2002 of 193,566 tonnes was 10% lower than zinc production in the prior fiscal year of 215,845 tonnes caused by an unplanned shutdown of the roaster in that fiscal year. Additional heat produced by roasting 100% Century concentrate was found to have damaged the roasters requiring repairs to the roaster dome roof to enable production to return to near normal levels at reduced temperatures in the following year.

In fiscal year 2002, zinc premiums averaged US$62 per tonne compared with US$73 per tonne achieved on sales in the previous year reflecting reduced demand for zinc in Europe as economic activity slowed.

Raw materials costs fell by 31% to €107.5 million in comparison to the prior year as a result of lower zinc prices and reduced purchases of concentrates and other materials during the year.

Operating costs in fiscal year 2002 fell by 9% to €73.2 million, again partially as a result of reduced employee costs following redundancies made in fiscal year 2001 and lower energy prices incurred in fiscal year 2002. Budel's electricity supply contract is partially linked to the zinc price, which caused the price reduction in fiscal year 2002.

The operational issues experienced during fiscal year 2002 discussed above resulted in Budel's unit operating cost, excluding depreciation and amortisation, increasing marginally to €378.17 per tonne of metal produced in the year compared to €371.10 per tonne for the previous year.

Depreciation and amortisation remained static in fiscal year 2002.

Clarksville Smelter (USA)

Earnings before interest and tax at Clarksville fell by US$2.9 million in fiscal year 2002 to US$2.5 million. Lower zinc sales and production were reported during 2002, however this was largely due to purchased zinc being recorded as sales in fiscal year 2001.

Earnings before interest and tax at Clarksville stated in Australian dollars was A$4.8 million for fiscal year 2002 compared with A$10.0 million for fiscal year 2001.

	Fiscal Year		EBIT Variance
	2002	2001	
	(US$ millions)		
Revenue	108.9	145.6	(36.7)
Sales Realisation Expenses	(7.7)	(8.2)	0.5
Stock Movements	1.0	(0.6)	1.6
Raw Material Costs	(52.6)	(76.4)	23.8
Operating Costs	(45.7)	(44.4)	(1.3)
Depreciation & Amortisation	(1.4)	(10.6)	9.2
Earnings before interest and tax	2.5	5.4	(2.9)

The impact of metal price and treatment charges on fiscal year 2002 earnings before interest and tax versus fiscal year 2001 is shown in the table below and is discussed in the analysis of the consolidated historical results.

	EBIT Impact
	(US$ millions)
Metal Prices	(3.5)
Treatment Charges	(5.5)
Total	(9.0)

In fiscal year 2002 zinc metal sales volumes from the Clarksville of 110,575 tonnes were 8,457 tonnes or 7% lower than sales volumes recorded in fiscal year 2001. Zinc metal production in fiscal year 2002 of 109,764 tonnes was 7% lower than zinc production in the previous year of 118,188 tonnes. However zinc production in fiscal year 2001 included 3,160 tonnes of purchased zinc and 2,590 tonnes of zinc made from purchased calcine, which were not undertaken in 2002. Underlying zinc production from concentrates was at similar levels in both years.

Due to the weaker U.S. economy, Clarksville achieved lower average premiums on zinc sales of US$93 per tonne during fiscal year 2002, compared with US$101 per tonne for the previous fiscal year.

Sales realisation expenses incurred in fiscal year 2002 fell by 6% to US$7.7 million reflecting the lower level of sales achieved in the year compared to the previous fiscal year.

The purchase cost of raw materials for fiscal year 2002 of US$52.6 million was 31% lower than in the previous fiscal year reflecting both lower metal prices and the reduction in purchased zinc and calcine.

Operating costs of US$45.7 million in fiscal year 2002 were slightly higher compared to the year before. Unit operating cost excluding depreciation and amortisation, rose by 11% to US$416.35 per tonne of metal produced in fiscal year 2002 compared to US$375.67 per tonne in fiscal year 2001.

Depreciation and amortisation was US$1.4 million in fiscal year 2002 compared to US$10.6 million in fiscal year 2001. In fiscal year 2001, a decision was made to write the value of the Clarksville assets down to nil. In subsequent years, all items of a capital nature have been initially capitalised and then depreciated fully in that year. Capital items fully depreciated in fiscal year 2002 were US$1.4 million.

Port Pirie Smelter

Earnings before interest and tax at Port Pirie Smelter increased by A$1.4 million to A$26.7 million in fiscal year 2002. Significantly increased metal production led to increased metal sales. Operating costs (before losses on asset disposals) were kept constant with the exception of energy costs which were impacted by a large electricity price increase during the year.

	Fiscal Year		EBIT Variance
	2002	2001	
	(A$ millions)		
Revenue	474.0	401.7	72.3
Sales Realisation Expenses	(45.5)	(42.6)	(2.9)
Stock Movements	22.7	5.7	17.0
Raw Material Costs	(269.9)	(202.7)	(67.2)
Operating Costs	(129.5)	(114.8)	(14.7)
Depreciation & Amortisation	(25.1)	(22.0)	(3.1)
Earnings before interest and tax	26.7	25.3	1.4

The impact of price, exchange rate and treatment charges on fiscal year 2002 earnings before interest and tax versus fiscal year 2001 is shown in the table below and is discussed in the analysis of the consolidated historical results.

	EBIT Impact
	(A$ millions)
Metal Prices	(17.5)
Treatment Charges	12.1
Exchange Rates	5.4
Total	0.0

Lead metals sales volumes achieved from the smelter of 254,884 tonnes in fiscal year 2002 were 47,206 tonnes higher, a 23% increase, compared with sales of 207,678 tonnes in the previous fiscal year. Production of lead metal of 275,012 tonnes in fiscal year 2002 represented an increase of 59,791 tonnes, or 28%, over the previous year. The substantial improvement in lead metal produced is an outcome of productivity programmes at the Port Pirie smelter.

Zinc metal sales volumes from the smelter in fiscal year 2002 of 36,070 were 7,409 tonnes, or 26%, higher in comparison to fiscal year 2001. Zinc production in fiscal year 2002 of 40,610 tonnes was 26% higher than zinc production in fiscal year 2001 of 32,110 tonnes.

In fiscal year 2002, Port Pirie achieved an average premium on zinc metal sales of US$76 per tonne compared with US$103 per tonne in the previous year. Average premiums achieved on lead metal sales were US$72 per tonne for fiscal year 2002 compared with US$56 per tonne achieved in the previous year. The net effect of the movements in the 2002 zinc and lead premiums resulted in an overall reduction in revenues. The respective decrease and increase in metal premiums reflects a ready availability of zinc metal and a tightening of supply of lead metal over the previous year.

Sales realisation expenses incurred in fiscal year 2002 increased by 7% to A$45.5 million in comparison to the prior year reflecting increased sales volumes achieved.

Stock increases of A$22.7 million in fiscal year 2002 reflect the build up of inventory to ensure sales were not interrupted during a planned maintenance shutdown early in fiscal year 2003.

The purchase cost of raw materials incurred during fiscal year 2002 of A$269.9 million was A$67.2 million higher than costs incurred in the prior fiscal year. This was due to the increased volume of materials sourced in line with the increased production and reduced treatment charge income.

Operating costs incurred for fiscal year 2002 for Port Pirie were A$14.7 million higher at A$129.5 million than for the previous financial year. Included in the operating costs for fiscal year 2002 was a loss of A$6.9 million on the disposal of assets. Excluding this item, an increase in energy costs was the main cause for the increase in operating costs. Energy costs rose by A$11.5 million mainly due to increased supplier charges following the privatisation of energy supply in South Australia.

Even with a large rise in energy costs, operational improvements resulted in unit operating cost, excluding depreciation and amortisation, falling by 12% to A$410.30 per tonne in fiscal year 2002 compared to A$464.16 per tonnes of metal produced in the previous year.

Depreciation and amortisation increased by A$3.1 million to A$25.1 million in fiscal year 2002, compared to A$22.0 million in fiscal year 2001.

Australian Refined Alloys (ARA)

Numbers reported below are our share of the joint venture.

Sales revenue reported for fiscal year 2002 of A$17.7 million was A$1.3 million, or 8% higher than that reported for the previous fiscal year of A$16.4 million. The increase in revenue was a result of higher sales volumes achieved while the average lead price realised during the year did not vary with the average price realised in the prior fiscal year. Production levels achieved in fiscal year 2002 were lower at 16,948 tonnes in comparison to 17,236 tonnes produced during fiscal year 2001.

Earnings before interest and tax of A$4.4 million for fiscal year 2002 was A$0.1 million higher than the earnings before interest and tax reported for the previous fiscal year of A$4.3 million. As discussed above, sales revenue reported for financial year 2002 was higher but as a result of the cost of materials also increasing, the increase in earnings when compared with the previous fiscal year was minimal.

Liquidity and Capital Resources

Liquidity

The following table sets out our pro forma EBITDA and capital expenditure for fiscal years 2003, 2002 and 2001 and fiscal half years 2003 and 2004.

	Fiscal year			Fiscal half year	
	2001	2002	2003	2003	2004
			(A$ millions)		
Pro Forma EBITDA and Capital Expenditure					
EBITDA [1]	470.4	298.0	179.2	131.0	131.0
Capital expenditure [2]	(297.8)	(225.5)	(197.2)	(106.1)	(70.3)
EBITDA less capital expenditure	172.6	72.5	(18.0)	24.9	60.7

(1) EBITDA means profit from ordinary activities before borrowing costs and income tax expense excluding interest income, adding back depreciation and amortisation and after normalisation adjustments set out in this Institutional Offering Memorandum.

(2) Capital expenditure means cash payments for mine development, expenditure deferred during smelter shutdowns and the acquisition of property, plant and equipment.

Following the listing of Zinifex Limited, ongoing capital expenditure requirements and working capital needs will be met from cash generated from operations, together with cash on hand and, where necessary, borrowings available under the working capital facility described below.

EBITDA less capital expenditure in fiscal half year 2004 of A$60.7 million increased by A$35.8 million compared to A$24.9 million in fiscal half year 2003. While EBITDA was flat over these two periods, this reflects a 6% reduction in revenues due to lower Australian dollar lead and zinc prices, offset by productivity improvements at our operating sites emanating from business improvement initiatives implemented over the last three fiscal years. Capital expenditure was A$35.8 million lower at A$70.3 million, reflecting concentration of capital expenditure on core processes during this period of constrained market conditions. Included in capital expenditure is mine development expenditure, primarily at Century. These costs were A$5.6 million lower at A$55.2 million, largely due to waste stripping costs at Century.

EBITDA less capital expenditure for fiscal year 2003 of A$(18.0) million represented a decrease of A$90.5 million compared to A$72.5 million for fiscal year 2002. This fall was due to reduced EBITDA of A$118.8 million, largely due to the impact across operations of external factors of metal prices, treatment charges and exchange rates. These negative impacts offset the positive effect of production and productivity improvements at a number of operations. Capital expenditure across all operations, which include mine development costs and expenditure deferred during smelter shutdowns, was reduced by over 13% to A$197.2 million for fiscal year 2003, as a result of continuing efforts in recent years to focus capital expenditure on core processes in a period of constrained market conditions. Capital expenditure includes expenditure on mine development, primarily at Century. Mine development costs decreased by A$16.3 million to A$121.0 million, primarily due to waste stripping costs at Century.

EBITDA less capital expenditure for fiscal year 2002 of A$72.5 million represented a decrease of A$100.1 million compared to A$172.6 million for fiscal year 2001. EBITDA fell by A$172.4 million to A$298.0 million, offsetting a reduction of capital expenditure by 24% to A$225.5 million for the year. Included in capital expenditure are mine development costs which dropped by A$4.4 million to A$137.3 million, primarily due to lower waste stripping costs at Century. The fall in EBITDA was largely due to the impact across operations of external factors of metal prices, treatment charges and exchange rates, which offset the impact of production and productivity improvements.

Capital Resources

Since the implementation of the Deed of Company Arrangement on 4 October 2002, the sole source of external funding utilised by Pasminco Limited was the Summit Facility provided by a group of eight banks under an agreement dated 4 October 2002 that was subsequently amended by five amending deeds, the latest of which was dated 24 December 2003. This facility is secured with a second priority security interest under the provisions of the Security Trust Deed implemented on 4 October 2002, which has securities in the form of a guarantee and indemnity from Zinifex and its subsidiaries and a fixed and floating charge over Zinifex's rights, property and undertakings of whatever kind and wherever situated and whether present or future. It should be noted that the only items with first priority security under the Security Trust Deed are Voluntary Administrators' Liabilities arising under section 443A of the Corporations Act arising in respect of Zinifex or its subsidiary companies, and remuneration, costs and expenses of the Voluntary Administrators and the Administrators incurred in respect to Zinifex or its subsidiary companies at any time. The Summit Facility provides for the repayment of the facility (excluding a residual amount of A$10 million) from the proceeds from the Offering.

We have negotiated with Australia and New Zealand Banking Group Limited, Deutsche Bank AG (Sydney Branch), National Australia Bank Limited, Societe Generale, Australia Branch and Westpac Banking Corporation, the terms and conditions for a new facility to meet our working capital requirements following the Offering. The facility will be an A$150 million revolving loan note facility. The facility will have a term of 364 days and will be secured with a second priority security interest under the provisions of the Security Trust Deed implemented on 4 October 2002, as described in the preceding paragraph. An establishment fee of 2% of the

facility limit is payable on commencement of the facility. A line fee of 1% per annum, calculated on the facility limit, is payable quarterly in advance. Interest will be charged at a margin of 1% over a base rate of BBSY for the selected interest period, which must be 3 months or less. The facility agreement will contain representations and warranties, financial covenants, undertakings and other terms and conditions customarily found in financing agreements of this kind. In particular, a financial representation and warranty will require that capital expenditure has not exceeded or is unlikely to exceed that disclosed in the initial cash flow projections contained in the Institutional Offering Memorandum. In addition, financial undertakings will require that the ratio of financial liabilities to EBITDA does not exceed 1.5:1, that the ratio of EBIT and amortisation of mine development expense to interest expense is at least 8:1 and that tangible net worth is not less than A$975 million. A schedule of conditions precedent has been defined to ensure consistency with other events occurring at settlement of the Offering. The facility will be immediately drawn following satisfaction of its conditions precedent to repay A$10 million in connection with the residual amount of the Summit Facility.

Zinifex will fund working capital requirements from internally generated funds and this working capital loan facility. Given the opening cash balance on 1 April 2004 of A$66 million and the forecast net cash flow totalling A$110 million over the period from the closing of the Offering to 30 June 2005, significant drawdowns of the working capital loan facility are unlikely to be necessary. Zinifex intends to replace the facility before its termination. The Directors have a reasonable expectation that this or a similar facility can be obtained. We believe that the combination of the working capital facility and our cash flows from operations will be sufficient to meet our ongoing working capital requirements.

Certain facilities at the Century mine and port operated by us were originally provided through operating leases in 1998 and 1999. These facilities included the port, pipeline and transfer vessel ("PPT"), the majority of the mine fleet and the mine site accommodation village. The lease for the mine fleet is to be terminated early in March 2004 with a drawdown from the Summit Facility. Zinifex will bear no liability for the drawdown from the Summit Facility which will be repaid from the proceeds from the Offering as noted above. The lease of the accommodation village continues to be treated as an operating lease. The accommodation village is leased from Northern Accommodation Management Pty Ltd ("NAM"), which in turn leases the village from National Australia Bank Limited. This lease expires in December 2006 and has an option to extend for a further 2 to 7 years. As at 31 December 2003, the total of further lease payments on the accommodation village was A$10 million. The termination value of this lease is determined by the date of termination. If terminated at 31 December 2003, the termination value would have been A$13.5 million.

The following loans, owed by Zinifex group companies, were originally raised in the context of the PPT transaction:

- the InvestCo Pty Ltd Loan Facility Agreement between Citibank Limited and Commonwealth Bank of Australia (as lenders) and InvestCo (as borrower) (the "InvestCo Loan"); and;
- the PPTV Loan Facility Agreement between a financing syndicate, an agent and PPTV Pty Ltd (the "PPTV Loan").

The terms of those loans are as follows:

- *InvestCo Loan*: The margin on this loan is 1.25% per year calculated daily. The loan is an interest-only loan, with the principal repayable at the beginning of 2008.
- *PPTV Loan*: The margin on this loan is 1.25% per year. Loan repayments of principal and interest are due semi-annually, and the loan terminates at the beginning of 2008.

The leases for the PPT facilities will be fully acquired by a Zinifex subsidiary at the time of the Offering and are treated as loans in our accounts. The outstanding balance of these loans provided by a consortium of banks was A$170.4 million as at 18 January 2004. The PPT loan requires bi-annual repayments with a final lump sum balance of A$72 million repayable in January 2008.

The terms of the loans are governed by common provisions agreement. Under this document Zinifex group companies provide to the lenders indemnities (including indemnities as to increased costs and taxes), representations and warranties, undertakings (both negative and positive), financial undertakings (in particular covenants that Zinifex group total liabilities will not exceed 65% of total tangible assets and an undertaking that the ratio of Zinifex group current assets to current liabilities does not fall below 110%), a negative pledge and a non-disposal covenant. The document also sets out certain events of default under which the loans are able to be accelerated and various inter-creditor provisions. The document also appoints an agent to represent the financiers.

The Security Trust Deed provides for outstanding loans related to the PPT facilities to be secured against the Zinifex group with a second priority security interest following the completion of the Offering by virtue of the provisions of the Summit Security Trust Deed.

We are currently negotiating the acquisition of five haul trucks and a shovel with an estimated value of A$24 million. We will evaluate procuring the use of this new equipment through operating leases. We have assumed that these leases will be effected in our forecasts included in this Institutional Offering Memorandum.

Quantitative and Qualitative Disclosures About Market Sensitive Instruments

We have various market price risks, which include exposure to zinc, lead, copper, silver, electricity, oil, foreign currency and interest rates. Of these, the dominant price risk is the combination of the zinc price quoted in US$ and the A$/US$ exchange rate.

Our strategy is to deliver to shareholders full exposure to the zinc price denominated in Australian dollars. Consequently, our policy to manage market price risk will be primarily to maximise natural hedges that can be utilised within the future business activities together with the maintenance of a strong balance sheet. Historical movements of the A$ zinc price have exhibited significant volatility. We do not currently intend to conduct an active hedging programme to hedge against this volatility.

We are subject to the effects of commodity and energy prices on both raw materials and products, with exposure primarily to zinc and lead and, to a lesser extent, copper, silver, electricity and oil. We do not currently conduct active hedging of any of these market price exposures. Consistent with our objective of realising floating market prices for metal sales, we offset fixed price forward metal sales contracts with hedging contracts of matching maturity and tonnage to ensure that the floating market price is realised at the sales contracts' maturity. Such outstanding hedging contracts amounted to 78,150 tonnes with a face value of US$68 million and a marked to market value of A$6.3 million as at 31 December 2003.

In the future, where we identify a mis-match between the pricing terms of external concentrate purchases and subsequent metal sales in our smelting activities, we will hedge to eliminate this mis-match, ensuring full exposure to floating metal prices while eliminating speculative exposures. Further, if the Australian dollar zinc price increases to such levels that our future breakeven position can be protected through purchase of hedging contracts at a very low cost, the Board will consider the merits of such action in the context of our strategy.

We will also be subject to the effects of interest rate fluctuations on the floating rate in the working capital facility and other external borrowings. There is no policy or plan that would require active hedging of these exposures.

CERTAIN PROSPECTIVE FINANCIAL INFORMATION FOR ZINIFEX

Set out below is prospective financial information for the Company for fiscal year 2004 and fiscal year 2005. We do not as a matter of course make public projections as to future sales, earnings, or other results. However, we have prepared the financial forecasts below to assist you in understanding our anticipated financial results from operations for these two fiscal years.

The accompanying prospective financial information was not prepared with a view towards complying with the guidelines established by the American Institute of Certified Public Accountants with respect to prospective financial information, but in the view of the Company was prepared on a reasonable basis, reflects the best currently available estimates and presents, to the best of our knowledge and belief our expected course of action and future financial performance. However, this information is not fact and should not be relied upon as being necessarily indicative of our future results, and readers of this Institutional Offering Memorandum are cautioned not to place undue reliance on the prospective financial information.

The prospective financial information included in this Institutional Offering Memorandum has been prepared by, and is the responsibility of, the Company. Ernst & Young has neither examined nor compiled the accompanying prospective financial information for purposes of its inclusion in an offering document provided to U.S. investors.

The assumptions and estimates underlying the prospective financial information are inherently uncertain and, although considered reasonable by us as of the date of this Institutional Offering Memorandum, are subject to a wide variety of significant business, economic, and competitive risks and uncertainties that could cause actual results to differ materially from those contained in the prospective financial information. Movement in an assumption may offset or compound the effect of a change in any other assumption. See "Risk Factors" for a discussion of various factors that could materially affect our financial condition, results of operations, business and prospects.

Accordingly, there can be no assurance that the prospective financial information is indicative of our future performance or that actual results will not differ materially from those presented in the prospective financial information. Inclusion of the prospective financial information in this Institutional Offering Memorandum should not be regarded as a representation by any person that the results contained in the prospective financial information will be achieved.

Subject to the continuous disclosure rules of the ASX Listing Rules and any obligation under the Australian Corporations Act to issue a supplementary or replacement Australian Prospectus, we do not intend to update or otherwise revise the prospective financial information to reflect circumstances existing since its preparation or to reflect the occurrence of unanticipated events or changes in general economic or industry conditions.

Prospective Income Statement Information

This section contains a summary of the prospective financial information for Zinifex. The prospective financial information contains:

- our pro forma historical EBIT and capital expenditure for fiscal half year 2004;
- our pro forma forecast of EBIT and capital expenditure for the six months to 30 June 2004 and fiscal year 2004;
- a forecast of NPAT and cash flow for fiscal year 2005; and
- a forecast of NPAT and cash flow for the three months ending 30 June 2004, representing the period between 1 April 2004 and the Company's first balance date.

The prospective financial information is based on a large number of assumptions concerning future events, including the general and specific assumptions set out below. The directors believe that they have prepared the prospective financial information with due care and attention and considered all assumptions when taken as a whole to be reasonable at the time of preparing this Institutional Offering Memorandum.

However, the actual results are likely to vary from the prospective financial information and any variation may be materially positive or negative. The prospective financial information and the assumptions on which it is based are by their very nature subject to significant uncertainties and contingencies, many of which are outside the control of the Company and are not reliably predictable. For a discussion of some of the important factors that could cause the prospective financial information to be different, refer to "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operation".

Accordingly, neither the Company nor its directors can give any assurance that the forecast performance as outlined in the prospective financial information or any prospective statement contained in this Institutional Offering Memorandum will be achieved. Events and outcomes might differ in quantum and timing from the assumptions, with a material consequential impact on the prospective financial information.

The prospective financial information should be read together with the assumptions underlying their preparation and the sensitivity analysis set out below, the Independent Accountant's Report on page F-2, "Pro Forma Historical Financial Information", "Risk Factors", "Management's Discussion and Analysis of Financial Condition and Results of Information", and other information contained in this Institutional Offering Memorandum.

Prospective Income Statement Information

	Pro Forma			
	(Actual)	(Forecast)		Forecast
	Fiscal Half Year 2004[1]	Six Months Ending 30 June 2004[2]	Fiscal Year 2004[3]	Fiscal Year 2005[4]
	(in A$ millions)			
Consolidated				
Sales revenue	775.9	870.0	1,645.9	1,658.7
Other revenue	3.3	—	3.3	—
Total revenue	779.2	870.0[6]	1,649.2	1,658.7
EBITDA[5]	131.0	169.6	300.6	366.6
Depreciation and amortisation[7]	(119.2)	(128.8)	(248.0)	(267.0)[8]
EBIT	11.8	40.8	52.6	99.6
Net interest income / (expense)				(7.7)
Net income / (loss) before tax				91.9
Income tax expense				(28.9)
Net income / (loss) after tax				63.0
Segment Information				
Sales revenue by site				
Century	238.5	250.6	489.1	508.3
Rosebery	56.0	62.6	118.6	118.1
Hobart	196.2	232.0	428.2	436.1
Budel	177.5	187.9	365.4	400.6
Clarksville	78.2	88.3	166.5	188.2
Port Pirie	216.9	229.7	446.6	408.4
ARA	8.4	10.3	18.7	19.6
Corporate / Other	6.2	1.5	7.7	2.9
Inter company eliminations	(202.0)	(192.9)	(394.9)	(423.5)
Total sales revenue	775.9	870.0	1,645.9	1,658.7
EBITDA by site[9]				
Century	121.0	109.6	230.6	225.5
Rosebery	24.4	30.8	55.2	46.5
Hobart	(0.8)	13.4	12.6	46.0
Budel	18.8	21.2	40.0	46.9
Clarksville	(2.9)	9.1	6.2	13.9
Port Pirie	10.3	17.5	27.8	50.5
ARA	1.5	2.5	4.0	4.8
Corporate / Other[10]	(25.1)	(48.2)	(73.3)	(58.3)
Inter company eliminations	(16.2)	13.7	(2.5)	(9.2)
Total EBITDA	131.0	169.6	300.6	366.6
EBIT by site[9]				
Century	38.1	29.1	67.2	64.8
Rosebery	12.5	17.9	30.4	19.8
Hobart	(11.4)	(0.8)	(12.2)	17.0
Budel	11.4	11.3	22.7	25.9
Clarksville	(3.1)	7.6	4.5	9.0
Port Pirie	4.7	9.1	13.8	28.7
ARA	1.3	1.6	2.9	3.0
Corporate / Other	(25.5)	(48.7)	(74.2)	(59.4)
Inter company eliminations	(16.2)	13.7	(2.5)	(9.2)
Total EBIT	11.8	40.8	52.6	99.6

(1) The historical results for fiscal half year 2004 are the actual normalised results for the period.

(2) The pro forma forecast for the six months ending 30 June 2004 has been prepared assuming Zinifex operated as an independent entity from 1 January 2004.

(3) The pro forma forecast for fiscal year 2004 represents the sum of our historical earnings for fiscal half year 2004 and our pro forma forecast for the six months ending 30 June 2004.

(4) No pro forma adjustments have been made to the forecast results for fiscal year 2005 on the basis that all adjustments included in the pro forma historical and forecast results will be in place for the full fiscal year 2005.

(5) EBITDA means earnings before interest, taxes, depreciation and amortisation. Zinifex believes that EBITDA provides useful information regarding Zinifex, but it should not be considered as an indication of, or an alternative to, net profit as an indicator of operating performance or as an alternative to cash flow as a measure of liquidity. Other companies may calculate EBITDA in a different manner than Zinifex.

(6) Total revenue for the six months ending 30 June 2004 includes one-off additional sales of A$49.8 million resulting from the Trafigura and Lee Kee agreements. The EBIT impact is expected to be immaterial.

(7) The book values used in calculating the depreciation and amortisation expense for the pro forma historical results for fiscal half year 2004 have been based upon the Pasminco group's book values prior to the restructuring, to form Zinifex. In connection with the restructuring to form the Zinifex group, Zinifex will acquire the companies that will make up the group and will record the assets and liabilities of these companies on the balance sheet at their fair value at the date of acquisition. The depreciation and amortisation expense for the pro forma forecast for the six months ending 30 June 2004 is based upon Zinifex's fair values as per the pro forma balance sheet as at 31 December 2003. The difference between the depreciation and amortisation expense shown for fiscal half year 2004 and the amount which would have been calculated assuming a basis consistent with that of the six months ending 30 June 2004 is expected to be immaterial.

(8) Mine development costs in fiscal year 2005 are expected to be A$154.3 million. The largest component of this will be mine development costs at Century mine. The following table sets out the calculation of total mining expense at Century.

	Forecast
	Fiscal Year 2005
Ore mining[a]	23.6
Bulk waste removal[b]	143.9
Total mining cash cost at Century	167.5
Deferred mining cost[b]	(143.9)
Deferred mining cost written back[c]	93.3
Total mining expense at Century[d]	116.8

(a) Ore mining represents cash cost of mining ore and selective waste and is expensed in the income statement as an operating cost.

(b) Bulk waste removal is treated as a deferred mining cost and written back on the basis of mill throughput over life of mine.

(c) Deferred mining cost written back is included in the depreciation and amortisation line in the fiscal year 2005 income statement.

(d) Total mining expense represents the sum of ore mining cash cost and deferred mining cost written back.

(9) Forecast segment data for EBITDA and EBIT at sites excludes the following costs for site services performed centrally, which have been included in Corporate. Going forward, the Company intends to report segment information net of these charges.

	Six Months Ending 30 June 2004	Fiscal Year 2005
Century	3.2	6.9
Rosebery	1.3	3.0
Hobart	4.3	8.5
Budel	2.9	6.3
Clarksville	0.6	1.5
Port Pirie	4.9	9.8
Total	17.2	36.0

(10) Corporate / Other in the forecast EBITDA segment information comprises the following items:

	Six Months Ending 30 June 2004	Fiscal Year 2005
Corporate costs	8.0	17.6
Site services performed centrally[a]	22.2	40.7
Corporate allowance for unplanned production disruption	18.0	—
Total	48.2	58.3

(a) Of these totals, A$17.2 million and A$36.0 million relate to costs in the six months ending 30 June 2004 and fiscal year 2005, respectively, that are currently charged out to operating sites. The remainder of the totals for each of these periods will also be charged out to operating sites in the future.

In addition to the financial results set out above, Zinifex has prepared a forecast for the three months ending 30 June 2004, representing the period between 1 April 2004 and the Company's first balance date. The Directors have selected this period on the assumption that the Offering is completed on 1 April 2004. Completion of the Offering on a date before or after 1 April may have a material impact on the financial results of Zinifex for the three-month period ending 30 June 2004. The results below have been prepared on a basis consistent with the results for the year ending 30 June 2005.

	Forecast
	Three Months Ending 30 June 2004[1]
Total revenue	432.0
EBITDA[2]	87.9
Depreciation and amortisation	(65.6)
EBIT	22.3
Net interest expense	(3.8)
Net income / (loss) before tax	18.5
Income tax expense	(4.9)
Net income / (loss) after tax	13.6

(1) No pro forma adjustments have been made to our forecast results for the 3 months to 30 June 2004 on the basis that all adjustments included in our pro forma historical and forecast results will be in place following the assumed date of listing.

(2) EBITDA means earnings before interest, taxes, depreciation and amortisation. Zinifex believes that EBITDA provides useful information regarding Zinifex, but it should not be considered an indication of, or an alternative to, net profit as an indicator of operating performance or as an alternative to cash flow as a measure of liquidity. Other companies may calculate EBITDA in a different manner than Zinifex.

Prospective Cash Flow Statement

Set out below is the forecast cash flow for the three months ending 30 June 2004 and fiscal year 2005.

	Forecast	
	Three Months Ending 30 June 2004[1]	Fiscal Year 2005[2]
	(in A$ millions)	
Cash flows from operating activities		
Receipts from customers	428.5	1,665.6
Payments to suppliers and employees	(309.7)	(1,268.9)
Payment of income tax	(5.7)	(14.4)
Interest and other financial costs	(1.2)	(8.3)
Net cash flow from operating activities	111.9	374.0
Cash flows from investing activities		
Payments for property, plant and equipment	(63.0)	(290.5)
Other investing activities	—	—
Net cash flow from investing activities	(63.0)	(290.5)
Cash flows from financing activities		
Proceeds from borrowings	—	—
Repayment of borrowings	—	—
Repayment of financial lease principal	—	(22.4)
Net cash flow from financing activities	—	(22.4)
Net increase in cash held	48.9[3]	61.1
Cash at the beginning of the financial period	66.0[4]	114.9
Cash at the end of the financial year	114.9	176.0

(1) No pro forma adjustments have been made to our forecast results for the three months to 30 June 2004 on the basis that all adjustments included in our pro forma historical and forecast results will be in place following the assumed date of listing.

(2) The forecasts for fiscal year 2005 have been prepared on a basis consistent with the results for the three months ending 30 June 2004.

(3) The statement of cash flows for the three months ending 30 June 2004 presents the expected cash flows of Zinifex as a stand alone group assuming that the Offering was completed on 1 April 2004.

(4) This amount could vary depending on working capital and exchange rate movements.

The Company's prospective pro forma EBITDA and capital expenditure, consistent with the basis of disclosure for the pro forma historical financial information, are set out below for the pro forma forecast period.

	Pro Forma		
	(Actual)	(Forecast)	
	Fiscal Half Year 2004[1]	Six Months Ending 30 June 2004[2]	Fiscal Year 2004[3]
		(in A$ millions)	
EBITDA[4]	131.0	169.6	300.6
Capital expenditure[5]	(70.3)	(157.3)	(227.6)
EBITDA less capital expenditure	60.7	12.3	73.0

(1) Our historical results for the six months ending 31 December 2003 are the actual normalised results for the period.

(2) Our pro forma forecast for the six months ending 30 June 2004 has been prepared assuming Zinifex operated as an independent entity from 1 January 2004.

(3) Our pro forma forecast for fiscal year 2004 represents the sum of our historical earnings for fiscal half year 2004 and our pro forma forecast for the six months ending 30 June 2004.

(4) EBITDA means earnings before interest, taxes, depreciation and amortisation. Zinifex believes that EBITDA provides useful information regarding Zinifex, but it should not be considered as an indication of, or an alternative to, net profit as an indicator of operating performance or as an alternative to cash flow as a measure of liquidity. Other companies may calculate EBITDA in a different manner than Zinifex.

(5) Capital expenditure means cash payments for mine development, expenditure deferred during smelter shutdowns and the acquisition of property, plant and equipment.

Summary of Significant Assumptions

Preparation of Prospective Financial Information

The prospective financial information has been prepared on the basis of numerous assumptions set out below. This information is intended to assist investors in assessing the reasonableness and likelihood of the assumptions occurring and is not intended to be a representation that the assumptions will occur.

Investors should be aware that the timing of actual events and the magnitude of their impact might differ to that assumed in preparing the prospective financial information and this may have a positive or negative effect on the Company's actual financial performance. Investors are advised to review the key assumptions in conjunction with the sensitivity analysis set out below.

General Assumptions

The Company's directors have also made the following general assumptions in addition to the specific assumptions outlined below:

- the Offering is fully taken up and the net funds raised from sale of Shares are used to satisfy the claims of Pasminco Limited's creditors pursuant to the deed of company arrangement executed by Pasminco Limited; the Company holds appropriate insurance arrangements to mitigate operational risks during the forecast period, including equipment failures and natural disasters; no significant changes in prevailing economic conditions and the rate of economic growth in Australia and internationally;

- any acquisitions or investments made during the forecast period will have no material impact on the forecast earnings and cash flows and that no further issues of Zinifex shares will be made during the forecast period;

- no changes of a material nature to the Company's accounting policies or to Australian Accounting Standards, Statements of Accounting Concepts or other mandatory professional reporting requirements which could have a material effect on the Company's forecast financial results and cash flows. The Company will adopt IAS with respect to fiscal year 2006 and at that time will show fiscal year 2005 comparative numbers under IAS. For a description of the significant differences between Australian GAAP and IAS, see Appendix B to this Institutional Offering Memorandum;

- no significant changes in legislation, regulatory requirements or government policy, or to the political or economic environment in Australia, Europe, the United States and other markets in which the Company operates;

- no significant industrial, contractual, competitive or political disturbances impacting on the Company and the continuity of its operations;

- no material environmental losses or material legal claims other than those which have been provided for;
- no significant change to the competitive landscape of the industries in which the Company will have an interest; and
- no change in taxation legislation which will have a material impact on the Company's forecast financial results and cash flows.

Revenue Assumptions

	Six Months Ending 30 June 2004	Fiscal Year 2005
	(tonnes)	
Sales volumes		
Contained zinc in concentrate	296,937	610,910
Contained lead in concentrate	64,140	100,578
Zinc metal	346,726	653,162
Lead metal	140,660	246,338
Silver metal	207	427
	(A$ per tonne)	
Prices		
LME zinc price	1,364	1,450
LME lead price	938	910
	(US$ per tonne)	
Prices		
LME zinc price	1,061	1,131
LME lead price	730	710
	(US$ per ounce)	
LME silver price per ounce	6.00	6.00
	(US$ per tonne)	
Treatment charge on zinc concentrates	147	153
Treatment charge on lead concentrates	120	122
Average zinc premium	107	113
Average lead premium	48	40
Exchange Rates		
A$/US$	0.778	0.780
A$/€	0.620	0.600

The Company's forecast revenues are primarily influenced by zinc and lead metal prices expressed in terms of Australian dollars per tonne. Based on the Company's evaluation of external research and historic data, we believe that trends in zinc and lead prices quoted in US dollars per tonne on the LME are reasonably correlated with the combined effects of metal inventories (an outcome of supply demand imbalances), global industrial production growth and a US dollar index of exchange rates with producer country currencies, such as the Australian dollar.

With regard to the US dollar index of producer currency exchange rates, this parameter appears to exhibit a partial inverse relationship with US dollar quoted metal prices. This relationship is often evident with a time lag. The observed relationship between these commodity metal prices and currency exchange rates also appears to be evident for the majority of globally traded metals and some other commodities. Accordingly, the recent steep rise in many US dollar base metal prices has only partially fed through to increased prices determined in producer currencies, such as the Australian dollar due to coincident depreciation of the US dollar against these currencies.

Given that US dollar metal prices and the A$/US$ exchange rate appear not to be independent variables, the Company has focused its assessment of forecast prices on prices based on the Australian dollar. In addition to its own evaluation of fundamental pricing drivers, the Company has polled a range of external forecasts from sources that provide both exchange rate and US dollar metal prices. This external consensus view is used as a further comparative source of projections for zinc and lead prices in Australian dollars per tonne. The sources polled are major global financial institutions. Additionally, the Company has researched the US dollar commodity price and treatment charge forecasts of industry specialist research providers such as Brook Hunt. These latter sources do not publish exchange rate forecasts and have thus not been directly included in the Company's Australian dollar metal price forecasts.

The forecast metal prices, expressed in Australian dollar per tonne in the above table can be obtained with a range of sets of US dollar per tonne prices and A$/US$ exchange rates. The specific combination of these two forecast factors selected by the Company is provided in the table above. The Company recommends that caution is exercised in the use of the individual US dollar per tonne and A$/US$ forecasts from the above table, in combination with individual parameters from other sources.

Operating Expense Assumptions

	Six Months Ending 30 June 2004	Fiscal Year 2005
Cash conversion costs of contained metal		
Mining (A$ per tonne)	516	535
Smelting (A$ per tonne)	496	504
Total conversion costs of contained metal		
Mining (A$ per tonne)	626	650
Smelting (A$ per tonne)	575	592

- Cash conversion costs of contained metal excludes selling, general and administrative, debt service, depreciation, depletion and amortisation (other than mine development costs). Contained metal includes zinc and lead.

- Total conversion costs of contained metal excludes selling, general and administrative and debt service. Contained metal includes zinc and lead.

- Costs in fiscal year 2005 have incorporated an inflation factor of 2%.

- Labour expenses have been forecast in accordance with current employment contracts and enterprise bargaining agreements.

- Other costs have been forecast on the basis of contractual arrangements, periodic maintenance plans and expected purchase arrangements.

Depreciation Expense

All items of property, plant and equipment are depreciated over their estimated useful lives, with spares capitalised and depreciated on the same basis to which they relate. The expected useful lives are as follows:

Buildings	40 years
Plant and equipment	5-20 years

Mine development and expenditure for initial access to reserves and capitalised exploration are capitalised and amortised over the reserve life on a units of production output basis.

Net Interest Expense

We have agreed the terms of a new facility to meet our working capital requirements following the Offering. The facility will be an A$150 million 364-day revolving loan note facility.

The interest cost on the secured loan for both the three months to June 2004 and fiscal year 2005 is the BBSY rate plus 1.00%, with an additional line fee of 1.00%.

The net interest expense is reduced by interest income calculated at 5.0% per annum on the cash balance.

Income Tax

Income tax expense for the Australian Operations is calculated at 30% however there are no tax payments included in the forecasts due to the carryforward tax losses. Tax on the Budel operations is included at 34.5% while Clarksville is assumed to pay tax at 37%. For a discussion of the availability of tax losses, see "Management's Discussion and Analysis of Financial Condition and Results of Operations".

Cash Flow Assumptions

Receipts from customers

The effect of the recent changes resulting from agreements with Trafigura and Lee Kee in respect of the sales and marketing of both commodity grade lead and zinc and EZDA metal produced in Australia and sold into Asia has been included in the forecasts. These effects include both once off and recurring components. A once off reduction of working capital arising from reduced inventories and customer credit terms provides an estimated cash flow contribution of A$76.8 million. Of the estimated A$76.8 million additional cash flow as a result of these arrangements, A$54.1 million is included in the period prior to 1 April 2004 and A$10.7 million is included in April and May 2004, with the balance of A$12.0 million assumed to be achieved in July 2004.

Additionally, recurring financial benefits that arise from a combination of improved sales margins and reduced fixed costs produce an annualised improvement in EBITDA and free cash flow of A$17.0 million, which is incorporated in the forecast revenue and cost assumptions for 2004 and 2005.

No other significant changes in the level of working capital have been assumed throughout the forecast period.

Capital Expenditure

Capital expenditure means cash payments for mine development, expenditure deferred during a periodic smelter major maintenance shutdown and the acquisition of property, plant and equipment. For a summary of capital expenditure by site, see "Business".

Sale of Property, Plant and Equipment

There will be no significant sales of property, plant and equipment during the forecast period.

Working Capital

Zinifex will fund working capital requirements from internally generated funds and a working capital loan facility. Given the opening cash balance on 1 April 2004 of A$66 million and the forecast net cash flow totalling A$110 million over the period from the Offering to 30 June 2005, significant drawdowns of the working capital loan facility are unlikely to be necessary. This facility has a term of 364 days from commencement, as is common with such facilities. Zinifex intends to replace the facility before its termination. The Directors consider that they have reasonable grounds to expect that this or a similar facility can be obtained.

Dividend Payments

The Company has not assumed the payment of a dividend or distribution within the forecast period.

Analysis of Prospective Financial Information

Revenue

Our revenue is expected to increase by A$9.5 million from A$1,649.2 million in fiscal year 2004 to A$1,658.7 million in fiscal year 2005. A major contributor is a forecast increase in the Australian dollar LME zinc price from A$1,318 per tonne average price for fiscal year 2004 (based on an actual LME zinc price of A$1,272 per tonne for fiscal half year 2004 and a forecast LME zinc price of A$1,364 per tonne for the six months to 30 June 2004) to A$1,450 per tonne for fiscal year 2005. Our forecast increase in revenue is also driven by an increase in zinc concentrate sales at Century from 867,708 tonnes to 898,858 tonnes.

The increase in revenue from fiscal years 2004 to 2005 is partially offset by the decline in zinc metal sales at Hobart and Port Pirie of 24,285 and 3,115 tonnes, respectively. This is primarily due to the sale of finished goods ex-inventory in fiscal year 2004 following the agreements with Trafigura and Lee Kee in respect of the sales and marketing of both commodity grade and EZDA metal produced in Australia and sold into Asia. In addition, lead sales at Port Pirie are forecast to decline by 39,375 tonnes to 226,125 tonnes in fiscal year 2005 as a result of the Trafigura marketing agreement, as well as the loss of lead bullion input from Cockle Creek, which closed in September 2003.

EBIT

Our EBIT is expected to increase by A$47.0 million from A$52.6 million in fiscal year 2004 to A$99.6 million in fiscal year 2005 partially as a result of increased Australian dollar LME zinc prices. In addition, increases in EBIT at Hobart of A$29.2 million to A$17.0 million and Port Pirie of A$14.9 million to A$28.7 million are also benefited by higher expected margins resulting from the Trafigura and Lee Kee agreements.

These factors are expected to be partially offset by an increase in costs at Century in fiscal year 2005, which include A$17.7 million in increased freight rates and A$21.0 million in increased treatment charges resulting from higher LME zinc prices and the renegotiation of base treatment charges.

Capital Expenditures

Our capital expenditure is expected to increase by A$62.9 million from A$227.6 million in fiscal year 2004 to A$290.5 million in fiscal year 2005, reflecting the following major capital items.

- an increase in deferred mining cost at Century of A$26.4 million from A$117.5 million in fiscal year 2004;
- an A$15.8 million increase in capital expenditure at Port Pirie relating to periodic major maintenance smelter and slag fuming shutdowns and general site infrastructure programmes;
- an A$12.2 million increase in capital expenditure at Hobart in relation to a periodic major maintenance roaster shutdown, EZDA expansion, acid storage and general replacement and refurbishment projects;
- an A$11.5 million increase in capital expenditure at Budel relating to a periodic major maintenance acid plant shutdown and expansion of cell house capacity;
- an A$13.7 million increase in capital expenditure at Rosebery in relation to additional expenditure on equipment to facilitate mining at deeper levels as well as increased deferred mining costs; and
- offsetting these amounts is a reduction in capital expenditure at Century on property, plant and equipment of A$21.4 million which predominately reflects the one-off impact of our expected acquisition of the leased mining equipment in fiscal year 2004.

Items Occurring Prior to the Restructuring

While we have not disclosed items below the EBIT line for our pro forma forecast for fiscal year 2004, the following material items will have one-off impacts on the Company's pro forma results prior to the restructuring date.

- In the six months to December 2003 Budel received a tax refund from the Dutch Tax authority of €16 million. As part of the agreement €8 million will be refunded to the Dutch tax authority over 4 years. The cash flow forecasts for the six months ending June 2004 and fiscal year 2005 both include a payment of €2 million.

- The Century mine had an existing operating lease for mining equipment, which matured in August 2004. These leases are to be bought out in March 2004 at a capital cost of A$31 million, plus A$4 million in operating costs.

- Commencing January 2004, the Company entered into an agreement with Trafigura and Lee Kee, whereby we ceased supplying commodity grade zinc and lead metal produced at Hobart and Port Pirie from warehouses in Asia and now sell this zinc and lead FOB to Trafigura. The transaction released an estimated A$76.8 million in additional cash flow from these arrangements, A$54.1 million is included in the period prior to 1 April 2004 and A$10.7 million is included in April and May 2004, with the balance of A$12.0 million assumed to be achieved in July 2004.

Financial Sensitivities

Set out below is a summary of the sensitivity of the prospective EBITDA for fiscal year 2005 to changes in a number of these key variables. The changes in the key variables set out in the sensitivity analysis are not the only changes that may be experienced in the forecast period.

You should be careful when interpreting these sensitivities. The Company has calculated the impact of changes in each of the variables in isolation from changes in other variables over the forecast period. In practice, changes in variables may offset each other or may be cumulative, and it is likely that the Company would respond to any adverse changes in one variable by taking action to attempt to minimise the net effect on the Company's earnings.

The range of sensitivities presented is not necessarily an indication of what the Directors expected to occur merely the measurement of the effects of an arbitrary move. The changes in the key variables set out in the sensitivity analysis are not intended to be indicative of the complete range of variations that may be experienced in fiscal year 2005.

	Sensitivity Factor		EBITDA change for Fiscal Year 2005
	Units	%	(in A$ millions)
LME zinc price (in A$ per tonne)	+/- A$25/tonne	+/- 1.7%	17.2
LME lead price (in A$ per tonne)	+/- A$25/tonne	+/- 2.7%	3.4
LME zinc price (in US$ per tonne)	+/- US$25/tonne	+/- 2.2%	22.1
LME lead price (in US$ per tonne)	+/- US$25/tonne	+/- 3.5%	4.4
LME zinc price (in US cents per pound)	+/- US$0.01/lb	+/- 1.9%	19.5
LME lead price (in US cents per pound)	+/- US$0.01/lb	+/- 3.1%	3.9
A$/US$[1]	+/- US$0.01	+/- 1.3%	(12.8)

(1) A increase of US$0.01 will have a negative impact on EBITDA of A$12.8 million and a decrease of US$0.01 will have a positive impact on EBITDA of A$12.8 million for fiscal year 2005.

DIRECTORS AND SENIOR MANAGEMENT

Directors

The members of our Board as of the date of this Institutional Offering Memorandum and their positions are detailed in the table below. All directors noted as "non-executive" are also independent (i.e., the non-executive directors meet the criteria in the ASX Corporate Governance Council's Principles of Good Corporate Governance and Best Practice Recommendations (March 2003)).

Name	Position
Peter John Mansell	Chairman (non-executive)
Greig Gailey*	Chief Executive Officer (to be Managing Director)
Peter William Cassidy	Director (non-executive)
Richard Knight	Director (non-executive)
Anthony Charles Larkin	Director (non-executive)
Dean Antony Pritchard	Director (non-executive)

* Mr. Gailey will join the Board of Zinifex on completion of this Offering.

Board of Directors' Biographies.

All of our non-executive directors were initially appointed to the board on 1 March 2004. Prior to this, these directors served as members of an advisory board in anticipation of this Offering and the formation of Zinifex Limited.

Peter John Mansell was a partner in the law firm Freehills from 1988 until 29 February 2004. Prior to that, from 1973 to 1987, he was a partner in a major commercial South African law firm. His present other listed public company directorships are with Bunnings Property Management Limited, Foodland Associated Limited, JDV Limited (Chairman) and West Australian Newspapers Limited. Amongst others, he is also a director of Silicon Metal Company of Australia Limited, its subsidiaries and the Australian subsidiaries of AngloGold Limited. He is the immediate past President of the Western Australian division of the Australian Institute of Company Directors, having sat on the National Council and National Board of that body during his Presidency. Mr. Mansell is Chairman of the Zinifex Board's Remuneration and Nomination Committee.

Greig Gailey started his career with British Petroleum Company in 1964 and has held various roles including General Manager Manufacturing & Distribution (Australia & New Zealand) and Managing Director European Refining. In 1998, he became CEO of Fletcher Challenge Energy, serving until its restructuring and sale to Shell in 2001. Mr. Gailey became CEO of Pasminco Limited in August 2001. He was elected Chairman of the Minerals Council of Australia in September 2003.

Peter William Cassidy was CEO of Goldfields Ltd until its merger with Delta Gold in January 2002 to form AurionGold. Prior to that he was Executive Director Operations of Renison Goldfields. He is a Director of Lihir Gold Ltd, Oxiana Ltd, Energy Developments Ltd and Sino Gold Ltd.

Richard Knight was CEO of The Iron Ore Company of Canada from 2000 until late 2001. Prior to that, he was Executive Director – Development and Executive Director – Bulk Commodities for North Limited, having previously been Chief Executive of Energy Resources of Australia since 1989. Mr Knight is currently Managing Director of Inco Australia Management Pty Ltd and a Director of Portman Ltd.

Anthony Charles Larkin was Executive Director Finance of Orica Limited from 1998 to 2002. Prior to that, he held various senior executive financial roles with the BHP group in a career spanning 39 years, including Group General Manager Finance, BHP Minerals, for seven years. In 1993, he was seconded to the position of

Chief Financial Officer of Fosters Brewing Group until 1997. Mr Larkin is a director of Incitec-Pivot Ltd and Ausmelt Ltd, and is a part-time Commissioner of the Essential Services Commission of Victoria. He is Chairman of the Zinifex Board's Audit and Finance Committee.

Dean Antony Pritchard was Chief Executive of Baulderstone Hornibrook from 1991 to 1997. He is Chairman of ICS Global Ltd, and a Director of OneSteel Ltd, RailCorp. and Eraring Energy. He is Chairman of the Zinifex Board's Safety, Health & Environment Committee.

Our Non-Executive Directors may not hold office for a continuous period in excess of three years or past the third annual general meeting following their appointment, which ever is longer, without submitting for re-election. Directors are elected or re-elected, as the case may be, by shareholders in a general meeting. Directors may offer themselves for re-election. A Director appointed by the Directors (e.g., to fill a casual vacancy) will hold office only until the conclusion of the next annual general meeting of the Company but is eligible for re-election at that meeting.

Corporate Governance

Role of our Board of Directors

Our Board is responsible for setting the strategic goals of the Company and for oversight of the management of the Company and direction of its business strategy, with the ultimate aim being an increase in shareholder value.

In carrying out its principal function, the Board's specific responsibilities include:

- providing strategic direction for, and approving, our Company's business strategies and objectives;
- monitoring the operational and financial position and performance of the Company;
- reviewing the principal risks faced by our Company and taking reasonable steps designed to ensure that appropriate internal controls and monitoring systems are in place to manage and, to the extent possible, reduce the impact of these risks;
- requiring that financial and other reporting mechanisms are put in place which result in adequate, accurate and timely information being provided to the Board and our Company's shareholders and the financial market as a whole being fully informed of all material developments relating to our Company;
- appointing and, where appropriate, removing the CEO/Managing Director, approving other key executive appointments and planning for senior executive succession;
- overseeing and evaluating the performance of the CEO/Managing Director, and other senior executives, having regard to our Company's business strategies and objectives;
- reviewing and fixing remuneration for the senior executives of our Company;
- approving our Company's budgets and business plans and monitoring the management of our Company's capital, including the progress of any major capital expenditures, acquisitions or divestitures;
- establishing procedures to ensure that financial results are appropriately and accurately reported on a timely basis in accordance with all legal and regulatory requirements;
- adopting appropriate procedures to ensure compliance with all laws, governmental regulations and accounting standards;

- approving, and reviewing from time to time, our Company's internal compliance procedures, including any codes of conduct and taking all reasonable steps to ensure that the business of our Company is conducted in an open and ethical manner; and

- regularly reviewing and, to the extent necessary, amending the Board and committee charters.

Committees of our Board of Directors

The standing committees of our Board will consist of an Audit and Finance Committee, a Safety, Health & Environment Committee and a Remuneration and Nomination Committee. These committees will be entitled to obtain independent professional or other advice at the cost of our Company, unless the Board determines otherwise and will be entitled to obtain such resources and information from our Company, including direct access to employees, as they might require.

The committees will operate in accordance with terms of references established by our Board.

Audit and Finance Committee

The role of the Audit and Finance Committee is to assist the Board in relation to financial reporting and disclosure, controls, funding, financial risk management including hedging and the internal and external audit functions.

Our Audit and Finance Committee will recommend a firm of independent outside auditors for appointment by the Board and ensure our management team maintains appropriate accounting records, internal control procedures and financial systems.

It will also meet with our financial management, internal audit management and independent outside auditors to review matters relating to our internal accounting controls, internal audit programme, accounting practices and procedures, the scope and procedures of the outside audit, the independence of the outside auditors and other matters relating to our financial condition.

The Audit and Finance Committee has the power to investigate any matter brought to its attention or which it deems appropriate within the scope of its duties and to retain counsel for this purpose where appropriate.

The Audit and Finance Committee is composed entirely of non-executive directors all of whom the Board considers to be independent. Mr. Larkin chairs the Audit and Finance Committee.

Safety, Health and Environment Committee

The role of the Safety, Health and Environment Committee is to assist the Board to fulfil its responsibilities in relation to safety, health, environmental and community interests. The Safety, Health and Environment Committee will ensure that appropriate improvement targets and benchmarks are in place for safety, health, and environmental responsibilities and will monitor potential liabilities, changes in legislation, and community expectations. The Safety, Health and Environment Committee is composed entirely of independent non-executive directors and is chaired by Mr. Pritchard.

Remuneration and Nomination Committee

Our Remuneration and Nomination Committee will review key employee compensation policies, plans and programmes, monitor performance and compensation of our employee-directors, officers and other key employees and set participation criteria and performance requirements for the employee share plans. The Remuneration and Nomination Committee will also consider future nominations to the Board, make recommendations for the

appointment and removal of directors, and implement procedures for evaluating the performance of the Board, its committees and individual directors. The Remuneration and Nomination Committee is composed entirely of independent non-executive directors and is chaired by the Chairman, Mr. Mansell.

Senior Executive Group

Executive Committee

The Executive Committee ("Exco") consists of the senior executives of the Zinifex group. The members are Messrs. Gailey, Fowler and Barnes.

The primary functions of the Exco are to manage the execution of the strategy of the Zinifex Group and to guide the delivery of its specific performance goals. The Exco's role includes the following:

- Creation, in conjunction with the Board, of the strategic and business plans that deliver Zinifex's strategic and financial goals for the purpose of meeting shareholders' expectations.
- Implementation of management operating plans and annual budgets, including monitoring of performance delivery and initiation of corrective responses.
- Development of proposals for consideration by the Board, in relation to acquisitions and disposals of businesses and assets, significant capital investments and contracts within defined limits.
- Accountable for establishing policy and practices relating to management succession, remuneration, and other people related matters.
- Responsibility for treasury functions, including advising the Board on capital management and financing needs.
- Creation of policy and its implementation in respect of areas including health, safety, security, the environment, code of conduct, business ethics and legal obligations.
- Implementation and review of risk management and compliance programmes.

Details of the members of the Exco are set out below (except for Mr. Gailey's information, which is furnished above):

Anthony Barnes, Chief Financial Officer since 2001. Tony joined Pasminco in April 2001. Prior to joining Pasminco, Tony spent the greater part of his career with BHP in accounting and finance positions within BHP Steel, BHP Minerals, Queensland Coal, the OK Tedi copper/gold mine in New Guinea and the corporate office. His more recent roles in BHP included Group General Manager Finance – BHP Petroleum and from 1997 led BHP Power as Group General Manager and President.

Paul Fowler, Chief Operating Officer since 2002. Paul joined Pasminco in May 2002 from Carter Holt Harvey Limited, where he was Chief Executive Forest Resources, responsible for ownership and management of Carter Holt Harvey forest land and trees. Prior to that he was Chief Executive Officer of Fletcher Challenge Forests. Before joining Fletcher Challenge Mr Fowler had 15 years of international experience with BP and Standard Oil, which encompassed petroleum refining and marketing, finance, commodity trading, strategic planning and gold mining.

Executive Management Team

Details of our senior executive team are set out below:

Fran Burgess, General Manager Rosebery Mine since 2003. Fran joined Pasminco in March 1990 after spending much of her career with Normandy and North Broken Hill Ltd in metallurgical roles. More recent roles in Pasminco include Manager Metallurgy at Century mine, Manager Metallurgy and Environment at Elura (now Endeavour mine) and Principal Technologist Mineral Processing with Pasminco Group Technical Support.

Ivan Cauley, General Manager Port Pirie Smelter since 2002. Ivan joined Port Pirie smelter in April 2000 and was appointed General Manager two years later. He has spent most of his career in operational and technical roles in base metals operations with Pasminco and MIM Holdings Ltd (now Xstrata). He has worked at Mount Isa Mines Ltd (technical and operations roles in process development, lead and copper smelters), Pasminco Cockle Creek Smelter (technical and operations roles), Britannia Zinc Ltd (Smelting Manager) and Port Pirie Smelter (Technical Support Manager and Business Improvement Manager).

Nic Clift, General Manager Technology since 2002. Nic joined Pasminco Limited in October 2002 after a career in operations and technical management in the mining industry in Africa, Europe, and Australia. More recent roles include Directeur Business Unit Zinc and Directeur des Operations with Metaleurop, at Noyelles-Godault in France, Betriebsleiter Schmeltzbetrieb with MIM Hüttenwerke Duisburg in Germany, and Manager Business Analysis for Pasminco Australian Smelting.

Andrew Coles, Group Treasurer since 2003. Andrew joined Pasminco Limited in May 2003 after 11 years with ExxonMobil in a range of positions in Australia and the United States, the most recent role being Treasurer of ExxonMobil Australia. Prior to joining ExxonMobil, Andrew commenced his career with CRA (now Rio) where he spent 11 years in a range of accounting and finance positions in Australia and the United Kingdom.

Anne Dekker, General Manager Sustainable Development since 2002. Anne joined Pasminco in February 2000 as Environment Manager for the Hobart smelter, before being appointed to her current position in July 2002. She held previous roles in environmental management in the pulp and paper industry with AMCOR in Tasmania and Carter Holt Harvey in New Zealand.

Brett Fletcher, General Manager Century mine since 2003. Brett joined Pasminco Broken Hill operations in 1989 after completing a Mining Engineering degree at the University of New South Wales. After several years in operational roles, in 1996 he was appointed Manager of Mining at Broken Hill. In 2000, Brett became the General Manager of the Pasminco Rosebery Mine, a position he held until mid-2003 when he was appointed General Manager of Century mine.

Stewart Howe, General Manager Strategy and Development since 2002. Stewart joined Pasminco in July 2002, following an international career in the oil and gas industry with BP and Amoco. Prior to Pasminco, he was Chief Executive of BP's Australasian Lubricants & Commercial Fuels Business Unit and an Executive Director of BP's global lubricants business following its acquisition of Burmah Castrol. Stewart earlier held strategy roles in BP's global headquarters and operations management positions in its refining business.

Matt Howell, General Manager ARA since 2003. Matt joined the former Electrolytic Zinc Company of Australasia Ltd, Hobart, in 1985 as a cadet metallurgist. He held a variety of technical, support and line roles with Pasminco before an assignment as Operations Project Manager for Genesis JV in Ningbo, China. More recent roles include Market Manager - Zinc, and Manager, Organisational Improvement. Matt was appointed General Manager of ARA in 2003.

Francesca Lee, Company Secretary and General Counsel since 2003. Francesca joined Pasminco in October 2003 from BHP Billiton where she worked in a variety of roles, including leading and managing the legal work on the public listings of BHP Steel Limited and OneSteel Limited. She has also held senior positions

at Rio Tinto Limited, Citibank Limited and Comalco Limited, including as General Corporate Counsel and General Manager – Internal Audit for Rio Tinto Limited, Vice President – Structured Finance for Citibank Limited and Corporate Counsel for Comalco Limited.

Sandra McDiarmid, General Manager Human Resources since 2002. Sandra joined Pasminco in 2002 from Sydney Water Corporation where she held the role of General Manager, People and Quality. Prior to that she was Human Resources Director with News Limited, and before that she held various positions with Fairfax Community Newspapers and News Suburbans.

Martin McFarlane, Group Manager Investor and Community Relations since 2003. Martin joined Pasminco as a graduate chemical engineer in 1987. He held various roles at the former Cockle Creek smelter, before transferring to Sales and Marketing in the Group Office. Martin was appointed Commercial Manager with the Exploration Group and, more recently, was Executive Assistant to the CEO focusing on strategic asset review.

Greg McMillan, General Manager Hobart Smelter since 2003. Greg joined Pasminco in January 2003 following more than 20 years experience with heavy manufacturing and industrial services companies, principally in the steel, iron, building materials and logistics sectors. Greg has held operational, sales, marketing and strategic planning roles, with the last eight years at general management level with Brambles Limited and Boral Limited.

Robert Novotny, President US Operations since 2002. Rob joined Pasminco in November 2002. Prior to that, he divided his career between operating positions and management consulting. He has held operating positions with Asarco Inc., Rubbermaid Inc., Frito Lay Inc., and B.F. Goodrich Chemical, and consulting positions with A.T. Kearney, PricewaterhouseCoopers, and Behre Dolbear. His most recent operating position was Vice President of Operations in charge of Asarco's Lead, Zinc, Silver and Aggregate businesses.

Lucien van den Boogaard, General Manager Budel Zink Smelter since 2000. Lucien joined the Budel Zink smelter in 1976 as a Process Technologist and subsequently held a variety of positions at the smelter. In 1993 he was appointed Plant Manager responsible for Production, Maintenance and Engineering, and Research and Development. In 1997 he was appointed General Manager of the former Cockle Creek smelter, before returning to The Netherlands in 2000 to become General Manager of Budel Zink smelter.

Bill Wise, General Manager Global Marketing and Sales since 2003. Bill worked for Pasminco since joining the Hobart smelter as a cadet in 1961. He has held a variety of senior management positions, including in Human Resources (Hobart smelter and Rosebery mine), Production (Hobart) and, more recently, Metals, Concentrates and By-Products Marketing for the Pasminco Group.

Remuneration of Directors and Senior Executives

Non-Executive Directors' Remuneration

Non-Executive Directors will receive a set fee per year and are fully reimbursed for any out of pocket expenses incurred on behalf of the Company. The annual fee of the Chairman will be A$280,000 and the annual fee of each non-executive director will be A$140,000. The fees represent the total reward arrangement inclusive of superannuation contributions. Non-Executive Directors will not receive any other retirement benefits. Under our Constitution, the maximum aggregate remuneration payable to the Non-Executive directors must not exceed an amount determined from time to time by the Company in general meeting. Currently, that amount is A$1.5 million. Under the Non-Executive Directors Share Plan, described below, Non-Executive Directors are required to sacrifice at least 20% (or such other minimum percentage determined by the Board from time to time) of their annual directors' fees to acquire Zinifex shares. This requirement ceases once the equivalent of a qualifying shareholding is held. The Board's current intention is that the Non-Executive Directors must sacrifice an amount equivalent to eighteen month's worth of current fees.

Senior Executives Remuneration

The remuneration of the Chief Executive Officer is determined by the Board based on market movements, performance and retention issues. The Remuneration and Nomination Committee also reviews and recommends to the Board the overall remuneration strategy and any proposed remuneration and any proposed change to the terms of employment of the direct reports of the Chief Executive Officer. The actual remuneration of senior employees is influenced by their individual performance, Company performance and the market place generally.

Remuneration is comprised of fixed and variable components. The fixed component known as Total Fixed Remuneration ("TFR") includes cash, superannuation and motor vehicles and is positioned to attract and retain appropriately qualified employees. The variable element consists of two components, a Short Term Incentive ("STI") and a long-term Executive Share Plan ("ESP").

The STI payments are contingent on the achievement of annual performance targets that are closely related to the key results expected in the Company's operating plan and financial projections. Prospective STI cash incentive payments for target performance vary between 15% and 30% of TFR, based on seniority, for all members of the senior executive group except the Chief Executive Officer. Details of the ESP are provided in the following section titled "Executive Share Plan".

The current Chief Executive Officer of Pasminco Limited will be appointed as Chief Executive Officer and Managing Director of Zinifex Limited and is the sole Executive Director. The remuneration package for the Managing Director of Zinifex Limited will be set out in an Executive Service Agreement commencing from 1 April 2004. It is the intention of the Board that the remuneration will be as follows:

- A total fixed remuneration (TFR) of A$1,500,000 per year, inclusive of superannuation but excluding short term incentive (STI) and the long-term incentive (LTI – shares).

- Subject to satisfaction of specific Company performance conditions agreed with the Board, a cash payment (STI) of up to 33 1/3%% of TFR. It is intended that the STI performance conditions of the Managing Director will include the attainment of set targets based upon the Company's free cash flow result and the achievement of key strategic change objectives, with the remainder being based upon his personal performance against a number of key operational outcomes and organisational milestones.

- A maximum LTI of up to 65% of TFR will be subject to achievement of performance hurdles based upon relative accumulated Total Shareholder Return and exceeding expectations in relation to other milestones relating to maximising the value of the business through commercial actions. The LTI will be in the form of Zinifex shares under the Executive Share Plan.

- The Managing Director and senior executives are also entitled to participate in Zinifex's Employee Share Acquisition Plan, as described in a later section.

- The Managing Director may also be reimbursed for expenses properly incurred as a Director or in the course of his duties.

- No senior executive has a TFR exceeding that of the Managing Director.

In the event of termination or resignation of the Managing Director, his contract provides for a Separation Amount which is the sum of one year of his TFR, accrued long service and annual leave, and at the Board's discretion a pro-rata amount for the elapsed period of the performance year relating to the STI and the ESP having regard to performance.

The nature and amount of each element of the emoluments of the executives of the Company receiving the highest emoluments in fiscal year 2003 are set out in the following table.

Name	Position	Cash Salary A$	Company Contributions to Superannuation A$	Incentive & Bonus Payments A$	Other Benefits A$	Termination Payments[b] A$	Total A$
G. Gailey	Chief Executive Officer	1,500,000	—	400,125	4,662	—	1,904,787
P. Fowler	Chief Operating Officer	706,617	9,279	—	365,085[a]	—	1,080,981
A. Barnes	Chief Financial Officer	347,010	80,340	250,000	—	—	677,350

[a] Includes consulting and release fees paid to a private company associated with the officer.

Zinifex Limited Share Plans

The Company has established Plans to assist in the attraction, retention and motivation of employees, executives and Directors of the Company and its subsidiaries. These Plans are the:

- Employee Share Acquisition Plan;
- Executive Share Plan; and
- Non-Executive Director Share Plan.

The Plans contain customary and usual terms in relation to the administration of the Plans, variation of the Plans and termination and suspension of the Plans. The key terms of each Plan are set out below.

Employee Share Acquisition Plan (ESAP)

General

The ESAP is a general employee share plan pursuant to which offers may be made to employees of the Group to receive up to A$1,000 worth of Zinifex shares each year free of Australian tax in accordance with current Australian tax legislation.

Under current Australian tax legislation, Zinifex shares acquired under the ESAP must be held in the Plan for a minimum of three years (or earlier cessation of employment), during which time the Shares are subject to a disposal restriction such that the participant cannot deal in (that is, sell or transfer) the Shares.

In accordance with the relevant Australian tax legislation, an employee participating in the ESAP cannot forfeit Zinifex shares allocated by the Company in any circumstances. The Board has the discretion to determine the specific terms and conditions applying to each offer. The Board also has discretion to determine whether an offer under the ESAP is made in a year.

Eligibility and Acquisition of Zinifex Shares

The eligibility of employees to participate in the ESAP will be based on criteria and other conditions to be determined by the Board having regard to relevant legislative and taxation requirements.

In general, it is intended that all full time and permanent part time employees of the Group (having completed a minimum length of service, if any, specified by the Board) will be eligible to acquire Zinifex shares under the ESAP on the terms and conditions determined by the Board.

The Board will determine the number of Zinifex shares, or the method or formula that will apply to determine the number of Zinifex shares that may be registered in the name of each participant (having regard to the limits imposed by current Australian tax legislation).

The Zinifex shares to be allocated to participants under the ESAP may be acquired through ordinary trading on the stock market (ASX or another securities exchange), by offmarket acquisitions, or by the issue and allotment of Zinifex shares to the participant. It is the Board's intention to initially issue all employees accepting the offer with A$1,000 of Zinifex shares at the time of the Offering (as described below) and for subsequent Zinifex shares required for the purposes of the ESAP to be sourced on market by the trustee of the ESAP.

The Board may determine the price at which the Zinifex shares will be offered to employees. Zinifex shares may be granted at no cost to the employee or the Board may determine that market value or some other price is appropriate. Under the ESAP financial assistance may be provided to participants for the purposes of acquiring Zinifex shares. Financial assistance may include providing free Zinifex shares to employees (*i.e.*, at no cost to the employee), providing "matching" Zinifex shares (*i.e.*, providing a number of Zinifex shares to match an employee's contribution) or inviting employees to sacrifice salary in return for Zinifex shares. It is the Board's current intention that in respect of any future offers under the ESAP the Company will match Zinifex shares acquired by employees with their own funds on a one-for-one basis, subject to a maximum amount and subject always to the requirements of current tax laws.

Restrictions on Trading

As described above, Zinifex shares acquired under the ESAP are subject to a disposal restriction for a minimum of three years, or earlier cessation of employment. The Company will implement such arrangements (including establishing a trust arrangement) as it determines are necessary to enforce this restriction.

Initial Offering

Eligible employees will be offered Zinifex shares up to a value of A$1,000 under the ESAP, at no cost to the employees. Eligible employees will receive more detailed information in relation to the terms of this initial offer in a separate document circulated with this prospectus.

In summary, approximately 2,558 employees will be eligible to participate in the initial grant under the ESAP. If all eligible employees choose to participate, this will result in the allocation of A$2.6 million worth of Zinifex shares to employees in the current year. Zinifex shares will be allocated subject to the terms described above. The Company will provide financial assistance to employees by granting the Zinifex shares to employees at no cost to them.

No amount will be payable by participants in relation to the initial offering pursuant to the ESAP.

Executive Share Plan (ESP)

General

After listing, the Company intends to introduce a long-term incentive plan designed to align the interests of the key executives of the Company with those of our Company and our Company's shareholders. Under the ESP, eligible executives identified by the Board may be granted Long Term Incentive Opportunities (each being an entitlement to a share for no consideration or for a consideration to be determined by the Board at the time, subject to the satisfaction of vesting conditions) on terms and conditions determined by the Board. If the vesting conditions are satisfied, the Long Term Incentive Opportunities vest and Zinifex shares will be delivered to the executive.

Eligibility

The Board will identify those senior executives who are eligible to participate in the ESP. Following the ASX listing, we expect that the eligible executives would be the Managing Director and members of the Company's senior management team.

Maximum Entitlement

It is the Board's intention that the value of conditional Long Term Incentive Opportunities in the form of Zinifex shares offered to eligible senior executives, including the Managing Director, under the ESP will fall in the range of 20% and 65% of their Total Fixed Remuneration ("TFR"), depending on the role and responsibility of the executive and the individual's seniority in Zinifex. It is intended that the Managing Director's conditional Long Term Incentive Opportunity will be up to 65% of his TFR as determined by the Board.

Performance Periods

The Board's intention is that there will be a three-year rolling performance period phased in progressively over the next three years of operation, with three-year cumulative results determining any award thereafter.

Vesting of Zinifex Shares

Zinifex shares will vest to an executive on the satisfaction of any performance conditions determined by the Board. The rules of the ESP will allow the Board to determine that additional restrictions on dealing with Zinifex shares apply after satisfaction of the vesting or performance conditions. This may include restricting Zinifex shares after vesting and/or requiring Shares to be held on trust.

In the event of cessation of employment due to redundancy or other reason approved by the Board during a year, the Board may determine that a number of Zinifex shares that will vest in that year, taking into account such factors as the Board determines, will be based upon the number of days that have elapsed during the year, provided that the employee has been employed by the Company or its subsidiaries for more than 6 months of that year.

In the event of resignation or termination for cause during a year, it is intended that no Zinifex shares will vest for that year and all potential entitlements of the employee will lapse.

Performance Conditions

The Board's intention is that the ESP performance conditions shall include a performance hurdle that is based upon the accumulated Total Shareholder Return ("TSR") of Zinifex Limited relative to a comparable group of Australian and international base metal companies. TSR is defined as the combined equity return of shareholders realised through a combination of dividends, capital returns and share price movement. Additionally, the ESP is expected to include a further performance hurdle to reward the employee for performance relative to financial and operational objectives, in circumstances where absolute accumulated shareholder return is subdued, because of external factors.

The percentage of a maximum award that vests will be determined by performance against these criteria. It is intended that the threshold performance will be the 50th percentile or above and the actual number of Zinifex shares will be awarded in accordance with the following table:

- TSR below the comparator 50th percentile (median) 0%
- TSR equal to the comparator 50th percentile 50%
- TSR between the 50th and 75th percentiles 50-100% pro-rata
- TSR equal or greater than the comparator 75th percentile 100%

The ESP rules provide for various circumstances in which an unvested Long Term Incentive Opportunity may lapse, including failure to satisfy performance conditions. The ESP rules also describe the circumstances in which these conditional entitlements may be forfeited.

Acquisition of Zinifex Shares

The Zinifex shares to be allocated to participants under the ESP may be acquired through ordinary trading on the stock market (ASX or another securities exchange), by offmarket acquisitions, or by the issue and allotment of Zinifex shares to the participant. It is the Board's current intention that Zinifex shares required for the purposes of the ESP would be acquired on market.

Restrictions on Trading

Other than the initial two year phase-in period of the ESP's operation, it is the Board's current intention that there shall be no further retention period (beyond the rolling three year performance period) required following an award being made and shares vesting with the employee.

Non-Executive Director Share Plan (NED Plan)

General

Following listing, all current and future Non-Executive Directors will be required to sacrifice a percentage of their annual directors' fees. As a result of this sacrifice, Zinifex shares will be allocated to the Non-Executive Directors under the NED Plan and must be held for a specified period.

Eligibility

Under the NED Plan, Non-Executive Directors are required to sacrifice at least 20% (or such other minimum percentage determined by the Board from time to time) of their annual directors' fees. This requirement ceases once a qualifying shareholding is held. The Board's current intention is that Non-Executive Directors must sacrifice an amount equivalent to eighteen months worth of current fees under the NED Plan. Non-Executive Directors will be able to elect to sacrifice more than 20% of their fees, up to a maximum of 100%, in any year under the NED Plan. It is intended that the NED Plan will operate from the first fee payment date following listing.

Restrictions on Zinifex Shares

Non-Executive Directors will not be able to sell or otherwise dispose of the Zinifex shares until the earliest of 10 years after acquisition, the Non-Executive Director ceasing to be a director of the Company, or the Non-Executive Director applying to the Board and the Board determining that any or all restrictions applying to the Zinifex shares cease.

Allocation of Zinifex Shares

Zinifex shares will be purchased on market by the trustee of the plan each quarter at the prevailing market price of Zinifex shares over a five-day period by applying an amount equal to the amount of fees a Non-Executive Director has elected to sacrifice to acquire Zinifex shares. It is intended that the allocation dates will be the last day of each quarter. If for legal or other reasons Zinifex shares cannot be purchased on market, each Non-Executive Director will be paid a cash amount equivalent to the amount of fees sacrificed.

DESCRIPTION OF THE SHARES

This section provides information describing the Shares and a summary of certain provisions of the Constitution that will apply upon completion of this Offering, the Australian Corporations Act and the ASX Listing Rules.

The rights attaching to ownership of the Shares arise from a combination of the Constitution, the Australian Corporations Act, the ASX Listing Rules and the common law. The following summary does not purport to be complete and is qualified in its entirety by reference to the full Constitution. To obtain a definitive assessment of the rights and liabilities which attach to the Shares in any specific circumstances, investors should seek their own advice.

Share Capital of Zinifex

Zinifex was registered in the State of Victoria, Australia, as a public company limited by shares on 9 August 2002 under its former name. Zinifex may, by resolution passed in a general meeting, alter or reduce its share capital in any manner provided for by the Australian Corporations Act.

Public Companies — Background

With respect to a public company limited by shares, each Shareholder's liability is limited to any amount unpaid on the Shares held by that shareholder. The claim of a shareholder to be repaid their contribution in a winding-up is not to be met until all of the Company's debts have been paid.

The Australian Corporations Act also imposes additional requirements for public companies which are intended to enhance their corporate governance. These include closer scrutiny of the acquisition of shares, stricter financial reporting requirements, restrictions on benefits to related parties, restrictions on directors voting on matters in which they have a material personal interest and requirements to hold annual general meetings and appoint an independent auditor. A public company that lists on the ASX is also subject to additional disclosure requirements imposed by the ASX Listing Rules and the Australian Corporations Act.

Issue of Further Shares

The directors control the issue of shares but must act in accordance with the Australian Corporations Act, the ASX Listing Rules, the Constitution and any special rights conferred on the holders of any shares or classes of shares.

The directors have the power to issue shares with preferential, deferred or other special rights, privileges, obligations or conditions attached, or issue shares with restrictions relating to dividends, voting, return of capital, payment of calls or otherwise.

The directors also have the power to grant options over unissued shares, issue redeemable preference shares or issue bonus shares (*i.e.*, for no consideration).

Shareholding Statements and Share Registers

On listing, it is expected that the Shares will be CHESS-approved securities. From listing, Zinifex will maintain an electronic issuer-sponsored subregister and the Securities Clearing House ("SCH") will maintain an electronic subregister. These subregisters together will make up the Australian register of shareholders. The Shares will not be certificated.

Shareholders on the Australian register will receive an initial statement of holding (similar to a bank account statement) when first established on the share register.

Joint Holders

If two or more persons are registered as the holders of a share, they are taken to hold the share as joint tenants with benefits of survivorship and the person whose name appears first on the register is the only joint holder entitled to receive notices from the Company.

Non-Marketable Parcels

The Constitution contains provisions consistent with the ASX Listing Rules and SCH Business Rules permitting Zinifex to sell holdings of shares of less than a marketable parcel (as defined in the SCH Business Rules). At least six weeks' notice of a sale must be given, and holders can elect not to have their shares sold by notifying Zinifex that they wish to retain their shares.

Calls by the Directors on Partly Paid Shares

Subject to the Australian Corporations Act, the ASX Listing Rules and the terms on which partly paid shares are issued, the directors may make calls (by giving notice) on the holders of shares for any money unpaid on them. Joint holders of shares are jointly and severally liable to pay all calls in respect of their shares.

If an amount called is not paid on or before the due date, the person liable to pay the amount must also pay interest on the amount at a rate determined by the directors, and all expenses incurred by the Company as a consequence of non-payment. However, the directors may waive payment of interest and expenses in whole or part.

Company's Lien on Shares

To the extent permitted by the ASX Listing Rules, the Company has a first and paramount lien on every partly paid share and dividends payable in respect of the share for all money due and unpaid to the Company, presently payable to the Company, or which the Company is required by law to pay (and has paid).

If the Company has a lien on a share for money presently payable, the directors may (subject to the ASX Listing Rules) sell the share in any manner determined by them and with or without giving any notice to the shareholder in whose names the shares are registered.

Forfeiture of Shares

The Company has the power to forfeit shares where a call or instalment becomes payable and remains unpaid by a shareholder. Unpaid dividends in respect of forfeited shares will also be forfeited.

Transfer of Shares

A shareholder may transfer shares by a market transfer in accordance with any computerised or electronic system established or recognised by the ASX Listing Rules, the Australian Corporations Act or the SCH Business Rules for the purpose of facilitating transfers in shares or by an instrument in writing in a form approved by the ASX or in any other usual form or in any form approved by the directors.

The Board may refuse to register any transfer of shares, other than a Proper ASTC Transfer (as defined in the Corporations Regulations 2001 (Commonwealth)), where registration would infringe any applicable laws or the ASX Listing Rules, if the transfer covers shares over which Zinifex has a lien or which are subject to forfeiture or where it is permitted to do so by the ASX Listing Rules. The Company must not refuse or fail to register or give effect to or delay or in any way interfere with a proper ASTC transfer of shares or other securities quoted by ASX.

Pre-Emptive Rights

Shareholders have no pre-emptive rights under the Constitution. However, the ASX Listing Rules provide that a pro-rata issue to holders of ordinary shares is one of the exceptions to the prohibition on a company issuing, without the approval of holders of ordinary securities, more securities than the number which is 15% of the ordinary securities on issue during the previous 12 months.

Proportional Takeover Provisions

The Constitution prohibits the registration of any transfer of shares giving effect to a contract resulting from the acceptance of an offering made under a proportional takeover bid unless the proportional takeover bid is approved by ordinary resolution. The offeror (and any associates of the offeror) are excluded from voting on that resolution. This prohibition will automatically cease to have effect on the third anniversary of the completion of the Offering.

Directors

The Directors manage the business of the Company. Directors may exercise all powers of the Company which are not required by law or the Constitution to be exercised by the Company in a general meeting. The Directors may delegate any of their powers to a committee or committees (consisting of any one or more Directors or any other person or persons as the Directors see fit).

The appointment and removal of Directors must be in accordance with the Constitution and the Australian Corporations Act. Unless the Company resolves otherwise, the Company will have a minimum of three Directors and a maximum of ten Directors. A Director may be removed before the end of the Director's term of office and another person appointed in the Director's place, by resolution passed in a general meeting.

Meetings and Notice

The Directors may call a general meeting of the Company at any time, and the Board must call annual general meetings, in accordance with the Australian Corporations Act. Shareholders may also request or call general meetings in accordance with the Australian Corporations Act. A general meeting may be held at two or more venues simultaneously using technology which gives the shareholders as a whole a reasonable opportunity to participate.

Shareholders are entitled to receive notice of, attend and vote at general meetings of the Company and to receive all notices, accounts and other documents required to be sent to shareholders under the Constitution, the Australian Corporations Act and the ASX Listing Rules. Except as permitted by the Australian Corporations Act, general meetings must be called on by giving at least 28 days' notice.

The business of an annual general meeting may include consideration of the annual financial report, Directors' report and auditor's report, election of Directors, appointment of the auditor, fixing the auditors' remuneration, or any other business prescribed by the Constitution or the Australian Corporations Act or which may be lawfully transacted at a general meeting. Shareholders are allowed a reasonable opportunity to ask questions about or make a comment on the management of the Company, and ask the Company's auditor (or their representative) questions relevant to the conduct of the audit and the preparation and content of the auditor's report.

No business may be transacted at a general meeting unless a quorum of shareholders is present at the commencement of the meeting. A quorum of shareholders is three. If a quorum is not present within 30 minutes after the time appointed for commencement, the meeting is dissolved, or will stand adjourned to a date, time and place determined by the Directors or the chair. If no quorum is present at any adjourned meeting within 30 minutes after the time for the meeting, the meeting is dissolved.

Voting

Every shareholder present in person (or by proxy, attorney or representative) at a meeting of shareholders has one vote on a vote taken by a show of hands and, on a poll, every holder of shares who is present in person (or by proxy, attorney or representative) has one vote for every fully paid share held by him or her, and a proportionate vote for every partly paid share, registered in the shareholder's name on the Company's share register.

A shareholder is not entitled to vote, or be counted in a quorum, at a general meeting in respect of shares on which all calls and other sums presently due and payable to Zinifex in respect of the shares have not been paid.

If more than one joint shareholder purports to vote, Zinifex will only count the vote of the shareholder whose name appears first in the register.

A shareholder who is entitled to vote at a general meeting of the Company may appoint not more than two proxies to attend and vote at the general meeting on the shareholders' behalf. An appointment of a proxy is valid if it is signed by the shareholder making the appointment and received by Zinifex at least 48 hours prior to the meeting. A proxy need not be a shareholder.

A resolution put to the vote of a meeting is decided on a show of hands unless a poll is demanded before a vote is taken or, in the case of a vote taken on a show of hands, immediately before or immediately after the results of the vote are declared. A poll may be demanded by any five shareholders entitled to vote on the resolution, by shareholders with at least 5% of the votes that may be cast on the resolution on a poll, or by the chairperson. The demand for a poll may be withdrawn.

Special resolutions are those which are passed by at least 75% of the votes cast by shareholders entitled to vote at a meeting of shareholders. An ordinary resolution is carried if the majority of the votes cast on the resolution are in favour of the resolution.

In the case of an equality of votes on a show of hands or a poll, the chairperson of the meeting has a casting vote in addition to the chairperson's deliberative votes as shareholder, proxy, attorney or representative of a shareholder.

Dividends

The Directors may by resolution determine a dividend payable and fix the amount, time for and method of payment.

Subject to any special rights or restrictions as to dividends, all fully paid shares on which any dividend is payable (unless otherwise determined by the Directors) are entitled to participate in that dividend equally, and each partially paid share is entitled to a proportional fraction of that dividend.

Dividends may only be paid out of the Company's profits, and will be paid at a fixed amount per Share. The Company will not pay interest on a dividend. The Directors may set aside reserves out of profits as they think appropriate for declaring a dividend or determining to pay a dividend.

The Directors may deduct from a dividend payable to a shareholder all funds presently payable by that shareholder to the Company on account of calls or otherwise in relation to shares.

The Directors may resolve that a dividend (interim or final) will be paid wholly or partly by the transfer or distribution of specific assets, including fully paid shares in, or debentures of, any other corporation.

The Directors may also establish a plan under which shareholders may elect to reinvest cash dividends by subscribing for shares, or may resolve that shareholders can elect to forego their right to share in the proposed dividend and receive an issue of fully paid shares instead.

All dividends unclaimed may be reinvested by the directors as they think fit for the benefit of the Company. The directors may resolve to capitalise the profits of the Company or any reserve available for distribution to shareholders.

See "Distribution Policy" for a discussion of the Company's policy in relation to payment of distributions.

Variation of Class Rights

The rights attaching to any class of shares may be varied only in accordance with the Australian Corporations Act. Unless their terms of issue state otherwise, the rights attached to any class of shares may be varied with the written consent of holders of at least 75% of the issued shares of that class or by a special resolution at a separate meeting of the holders of shares of that class.

The Constitution provides that all of its provisions that relate to general meetings apply to any special meeting of any class of shareholders that may be held under the Constitution or the Australian Corporations Act.

Liquidation Rights

Once all of the liabilities of the Company are satisfied, a liquidator may divide among the contributories the whole or any part of the remaining assets of the Company as the liquidator deems fit.

Any division of the assets may be otherwise than in accordance with the legal rights of the contributories, but any contributory who would be prejudiced by the division has a right to dissent and ancillary rights as if the determination were a special resolution passed under the Australian Corporations Act relating to the sale or transfer of the Company's assets by a liquidator in a voluntary winding up.

Alteration of Constitution

The Constitution can only be amended, modified or repealed by special resolution passed by at least 75% of shareholders present (in person, or by attorney, proxy or representative) and entitled to vote at a general meeting of shareholders.

AUSTRALIA REGULATORY SUMMARY

Introduction

The business activities of the Company's subsidiaries in Australia (the "Australia Group") are regulated by various agencies and departments of the Australian federal government, and various state governments. The following discussion is a summary of certain Australian federal and state laws and regulations relevant to the operations of the Australia Group. The following is intended for general information only and does not purport to be a complete analysis of all legal regulation that may be relevant to the Australia Group. The discussion is based upon certain Australian federal and state laws and regulations now in effect, all of which are subject to change at any time. Any such changes may be applied retrospectively in a manner that could adversely affect the Australia Group.

Corporate

Commonwealth corporations legislation the Corporations Act regulates corporations, the securities industry, the futures industry and related matters throughout Australia. The Australian Securities and Investments Commission ("ASIC") administers the national law to ensure compliance by corporations and individuals.

Zinifex Limited is registered as a public company limited by shares under Part 2A.2 of the Australian Corporations Act. Zinifex Limited is registered in the State of Victoria, Australia.

For a summary of the restructuring of Pasminco Limited and the formation of Zinifex, see "Voluntary Administration and Restructuring of Pasminco Limited" in this Institutional Offering Memorandum.

Chapter 6D of the Australian Corporations Act regulates fund-raising through offers of securities in Australia.

Property

General Introduction

Australian land law is based on the private ownership of land under which land rights are freely transferable according to the relevant state and territory laws.

Main Forms of Land Holding

Australian land law is based on two main forms of land holding, being:

- freehold estate (or fee simple), which gives absolute and unrestricted ownership of land; and
- leasehold estate, which gives exclusive possession to the holder of the estate for a specified duration.

Registration of Rights in Land

Australia's system of land ownership is designed to record any legal interest in private land on a government administered register. This system applies to the vast majority of privately held land in Australia.

Registration of land rights offers reliable protection for the person receiving the rights and allows a prospective buyer to determine interests others may have in the land.

Government Land

A significant proportion of land in Australia is government land. The relevant state or territory government can:

- grant freehold interests (in which case the land then moves to the private land law system); or
- grant statutory interests similar to those under private law land (leases, easements and licences) where the conditions of use are set by reference to legislation.

Some interests in land created under legislation may be listed on government registers. Those that are not are nonetheless valid and enforceable against the relevant government and third parties in accordance with the conditions of the grant. The various governments may also grant other forms of rights over government land and/or have overriding rights over private land, as described below.

Mining Law

General

In Australia, the ownership of minerals has been separated from ownership of the surface of land. Each state or territory government has passed legislation appropriating the ownership of all minerals to itself on behalf of the public. Public ownership of minerals underpins the regulation of the mineral resources industry by legislation at the state level.

Therefore, competing interests exist between the holders of mining rights under legislation and land title holders. In each state and territory, those competing interests are balanced by legislation, the key features of which are that:

- the government owns all minerals (with some minor exceptions), separating rights to minerals from other interests in land;
- an interest or "tenement" granted under legislation is required from the state to carry out all mining activities including exploration and mining. Separate tenements are required for each of exploration and mining activities;
- tenements and other licences are available under mining legislation for purposes incidental to mining including access, storage and some processing activities such as washing and crushing;
- a granted tenement may be assigned or otherwise dealt with, subject (usually) to the consent of the State or Territory Minister responsible for administering the legislation under which it was granted;
- a tenement will only be granted or assigned when certain preconditions have been met. Conditions may include the posting of a security bond, payment of any outstanding rent or royalties, the granting of an environmental authority over the tenement and compliance with the requirements of the relevant State mining legislation, and after the grant is made it will be subject to further conditions for its duration; and
- a bond is required to be paid, as a condition of most tenements, to ensure that the site is rehabilitated at the completion of mining operations. Rehabilitation is generally controlled by conditions contained in the tenement and associated environmental authority.

Subject to compliance with native title requirements, once a tenement is granted by the state or territory, the tenement holder will then have an enforceable right to enter upon the land and undertake all works authorised under that grant and by the empowering legislation. This is a right enforceable against all others, including the land title holders or their tenants.

The holder of a mining tenement must comply with the conditions attached to the grant of the mining tenement and the regulatory scheme established under the legislation. This may involve significant expenditure which adds to mining and operating costs. Where a tenement holder fails to comply with the regulatory scheme, it may be liable for financial penalties, prosecution or forfeiture of its tenement.

Although the conditions included in tenements and the regulations governing them may be subject to change or amendment by the state or territory in certain circumstances, it is rare for this to occur unilaterally and without prior notice or negotiation.

Agreements with Land Holders

Land holders are entitled to be compensated for loss suffered or likely to be suffered by work undertaken by the holder of a mining tenement under that authority. The compensation payable is for damage to the land and improvements and loss of the use of the affected area but is not connected to the value of minerals taken from the land.

It is common industry practice for negotiations to produce an agreement that is suitable to both the miner and land holder.

Royalties

All Australian jurisdictions require that royalties be paid for minerals taken from the land. The amount of royalty, the method of calculation and the minerals covered differ from jurisdiction to jurisdiction. While there are some flat rate royalties, others involve complicated calculations taking into account the market value of the mineral and an index price set by the jurisdiction.

All jurisdictions have strict reporting requirements to allow the proper calculation of the royalty owed. Where the royalty calculated by the miner does not appear to be correct, the jurisdiction is entitled to audit the mine, estimate the amount owed or vary the royalty required. Where payment is not made within a prescribed time, interest is added to the amount owed. Non-payment of royalties for an extended period of time may result in the tenement being forfeited.

Health and Safety

Zinifex group's operations are subject to health and safety legislation and regulations which impose extensive obligations and a duty of care on the group to protect the health and safety of persons at its mine and refinery sites and to ensure that where there is a risk to the health and safety of those persons, that level of risk is acceptable. Different reporting and inspection procedures apply to mines which do not apply to other businesses.

Some state health and safety legislation allows regulations or guidelines to be made prescribing how things may be done in relation to mining operations generally and where those regulations or guidelines are followed, the company's obligations will be discharged. Further, legislation may require that mines have in place a safety and health management system which complies with the regulatory scheme in force within a particular State.

Compliance with health and safety regulation is required industry wide and represents significant expenditure contributing to mining and operating costs.

Planning Controls

In each state, development and/or planning consents are required for many land uses, including mining. Generally, those consents also authorise the construction of buildings and works. However, the holders of mining tenements are usually afforded some protection from the requirements of complying with planning legislation. The extent of that protection varies from jurisdiction to jurisdiction. In some states and territories, the costs associated with obtaining development and/or planning consents can be significant – usually in relation to large projects which have potential for significant environmental impact.

Native Title

"Native title" describes the rights and interests of Aboriginal and Torres Strait Islander people in land and waters according to their traditional laws and customs as recognised by the common law of Australia. Native title does not equate to our common understanding of "title" to land in the sense of ownership of land and may consist of different rights and interests. Examples include the right to:

- access land;
- hunt, gather and fish;
- conduct ceremonies;
- camp; and
- have possession, use, occupation and enjoyment of the land.

Native title law has evolved through judicial decisions and the enactment of legislation. The first significant High Court of Australia decision on the subject of native title was Mabo v Queensland (No 2) (1992) 175 CLR 1 (the "Mabo decision") where the Court recognised the concept of native title and said that Aboriginal and Torres Strait Islander people who have maintained their connection with their land and waters in accordance with their traditional laws and customs may hold native title. Proving connection involves showing that traditional laws and customs have been passed down through generations of Aboriginal or Torres Strait Islander people from the time of sovereignty to the present day. The native title rights and interests held by a particular group will depend on the traditional laws and customs of those people. Recent decisions have indicated that the content of native title rights and interests may change over time.

The Mabo decision also recognised that native title could be extinguished by government legislation or inconsistent executive action. In response to the Mabo decision, the Commonwealth Government enacted the Native Title Act, 1993 ("NTA") which validated acts done prior to 1 January 1994 ("past acts") that were invalid with respect to native title and allowed the states and territories to enact their own validation legislation. Subsequent amendments also validated grants ("intermediate period acts") made by the Commonwealth (and allowed the states and territories to enact similar legislation) relating to certain acts that occurred between 1 January 1994 and 23 December 1996.

The NTA also specifies the conditions to be satisfied and the procedures to be followed in order for acts done after 1 January 1994 ("future acts") to be valid with respect to native title. Finally, the NTA also established the National Native Title Tribunal (the "NNTT"), responsible for mediation of native title claims, administering the various procedures under the NTA governing native title claims and determining whether certain future acts can validly proceed with or without conditions.

Where a member of the Zinifex group holds land or a tenure where a past act or an intermediate period act has taken place, these acts have been validated with respect to native title. The operations of a member of the Zinifex group that are on freehold title are, based on the decision of the High Court in Fejo v Northern Territory (1998) 195 CLR 96, free of native title as the grant of freehold permanently extinguishes native title, although expansions of operations may attract the future act requirements of the NTA if a member of the Zinifex group extends to areas outside the freehold tenure in relation to which native title may not have been wholly extinguished.

Native title may exist in areas where it has not been wholly extinguished. Although a determination of native title does not invalidate anyone else's rights, the High Court decision in the Wik Peoples v Queensland (1996) 187 CLR 1 case made it clear that native title may co-exist with other forms of tenure where that tenure is

not exclusive, provided the native title rights are not inconsistent with the exercise of the other rights. In August 2002, the High Court handed down its decision in State of Western Australia v Ward (2002) 191 ALR 1 ("Ward"). It held, among other things, that there could be partial extinguishment of native title rights and interests and that Western Australian mining and petroleum legislation extinguished all native title rights and interest that may have existed in relation to minerals and petroleum. The High Court also held that a mining lease under the relevant Western Australian legislation extinguished any native title right to control access to land, or to be asked permission to use, or have access to, the land, but it does not necessarily extinguish all native title rights. In particular, it does not extinguish those native title rights that are consistent with the rights granted to a pastoral or mining leaseholder. This decision provides some clarity about the impact of native title on pastoral leases and mining tenements, but also leaves many issues to be decided which will need to be considered on a case-by-case basis. As a result, it is difficult at this stage for the Zinifex group to make any assessment of the impact of the Ward decision on any claimant applications for native title over Zinifex group's operations.

Native title is not an issue unique to Australia. It exists and has enjoyed prominence in other jurisdictions such as Canada and the United States. However, unlike Canada and the United States, Australia has passed legislation recognising and protecting the rights of its indigenous people and regulating the way those rights may be impacted by other rights.

In relation to the mining sector, the NTA generally requires that native title holders be treated in a similar way to other land holders. That is, they must be provided with an opportunity to negotiate an agreement (which may include compensation) in relation to the grant of mining tenements over native title land. If an agreement cannot be reached in relation to the relevant land, a process is prescribed under which an independent body (usually, the NNTT) determines whether the mining tenement can be granted and if so, the terms and conditions on which it can be granted. The processes prescribed are different to those which apply to other land holders. They reflect the unusual nature of native title, the special connection of native title claimants to land and the different circumstances experienced by most indigenous communities.

Each state is able (with approval from the Federal Minister) to establish its own process for dealing with native title in relation to grants of mining tenements. To date, only Queensland, New South Wales and South Australia have done so; however, Queensland has recently adopted the Commonwealth procedures under the NTA in relation to future grants. In some of these states, certain native title requirements must be satisfied before a tenement holder can exercise rights under a mining exploration tenement granted by that state. In those states, for a mining production tenement, the grant itself is dependent upon those requirements having been met. This can include reaching an agreement with any claimants or holders of native title regarding proposed mining operations on the tenement.

Aboriginal and Torres Strait Islander Heritage

Each of the States and the Commonwealth has passed legislation to protect and preserve objects and sites which are of significance to Aboriginal and Torres Strait Islander people. That legislation applies to any land, regardless of the background tenure or whether native title exists.

Tenement holders must observe the provisions of that legislation in relation to operations conducted under authority of their tenements. Specific legislative requirements may vary from state to state. As a general matter, Aboriginal heritage legislation provides for the maintenance of a register identifying areas or sites of significance to Aboriginal people, requiring that discovered sites be reported, and creating offences in relation to damage, disturbance, removal or interference with Aboriginal objects and remains, or sites of significance.

Aboriginal heritage legislation is a significant factor impacting upon the operation of mining activities in Australia.

Environmental Matters

General

Australian environmental law will impact upon the ongoing operations of Zinifex group's facilities, any possible expansion or development of these facilities and the possible liability of the Zinifex group to remediate contamination.

Environmental regulation in Australia occurs through legislation at both the federal and state level and, to a limited extent, the common law. For constitutional reasons, most environmental regulation occurs at the state level and affects operations conducted within that state. The Zinifex group has operations in New South Wales, Queensland, South Australia, Tasmania and Victoria and, accordingly, legislation passed by each of these states applies to members of the Zinifex group which has operations conducted in that state.

Environmental laws and regulations in Australia are continuing to develop and become more stringent, with international trends and treaties becoming increasingly relevant and international treaty obligations now protected by Federal legislation.

Ongoing Operations

Environmental laws impact upon Zinifex group's existing Australian operations, principally by regulating:

- the emission or discharge of pollutants from Zinifex group's facilities;
- the remediation and/or cleanup of any contamination;
- the storage of hazardous substances;
- the management, storage and disposal of waste and hazardous substances; and
- the emission of noise and odour.

There are a range of offences for breaches of these environmental laws. Penalties range from substantial fines and jail terms to warning notices. Other consequences include payment of compensation, suspension or revocation of a licence, or an order to control, prevent or lessen the environmental harm caused by an offence. Directors and managers can, in some instances, be personally liable for the offences.

Further Development or Expansion

Environmental laws will impact upon any future possible development or expansion of Zinifex group's existing operations and facilities. Depending upon the size and nature of any proposed development, the preparation of an environmental impact statement may be required which may involve public participation and consultation. This can be a lengthy, time consuming and costly process.

Remediation Obligations

State environmental authorities are able to order occupiers of contaminated sites, or the entity responsible for the contamination, to remediate the contamination. This includes offsite contamination caused by the entity. Failure to comply is an offence. Public authorities can carry out remediation if clean-up notices are not complied with, and can recover the costs with interest from the owner/occupier of the land.

Remediation costs can be substantial.

Dangerous Goods

In most jurisdictions, licences are required for the transport, use and storage of dangerous goods. In others, dangerous goods must be notified in accordance with applicable regulations. Failure to hold relevant licences or non-compliance with the regulatory regime can result in significant penalties being imposed.

Human Resources and Industrial Relations

Industrial Relations System

Australia has a federated legal system, with industrial relations being regulated by both federal and state laws. Terms and conditions of employment are regulated by federal and state legislation, federal and state awards, enterprise agreements, individual workplace agreements and common law contracts of employment.

Federal legislation sets minimum levels of superannuation (currently 9%) and provides redress for employees who have been unfairly dismissed or discriminated against on the basis of specified grounds such as race, disability or sex. State legislation regulates workers' compensation, occupational health and safety, various leave entitlements and, in the majority of states, remedies for unfair dismissal and discrimination. Federal legislation overrides State legislation to the extent of any inconsistency.

Awards are legally binding determinations made by the Federal or a State industrial relations tribunal. They set out minimum terms and conditions and are binding on the employers, employees and unions that are parties to them. Awards made by a State tribunal can apply as a "common rule", that is, they can apply to all employers of employees whose work is covered by the terms of the award, or may bind only specific enterprises. Federal awards apply only to named parties. Awards have recently become more limited in their scope and generally operate as minimum "safety net" provisions. There is an increased emphasis on setting terms and conditions of employment by enterprise agreements. Under Federal and State laws, enterprise agreements can be negotiated by an employer with relevant unions or collectively with its employees. The agreements must be scrutinised by the relevant industrial tribunal and only operate once "certified" by the tribunal. They have a specified period of operation, but continue to operate beyond that period until replaced by another agreement or terminated by the relevant industrial tribunal. In general, enterprise agreements prevail over awards to the extent of any inconsistency.

Australian Workplace Agreements ("AWAs") are agreements between employers and individual employees. They are regulated under Federal law and must be approved by a statutory office, known as the Employment Advocate, before they come into operation. They are less common. AWAs prevail over any awards and enterprise agreements. There are similar instruments under some State laws.

Significant penalties may be imposed on employers who breach awards, enterprise agreements or AWAs.

Zinifex Group's Arrangements

Each site has different arrangements in place to govern the terms and conditions of employees based at each site. Hobart, Port Pirie and Rosebery each has a State enterprise agreement underpinned by a State award. Each of these is binding on the relevant employer entity within the Zinifex group and various unions, principally the Australian Workers' Union, the Automotive, Food, Metals, Engineering, Printing and Kindred Industries Union, the Communications, Electrical, Electronic, Energy, Information, Postal and Plumbing and Allied Services Union, the Construction, Forestry, Mining & Energy Union and the Australian Municipal, Administrative, Clerical and Services Union. These unions are national organisations that are industrially active. Union membership is generally high amongst the "blue collar" workforce in each of these locations.

The enterprise agreement in place at the Hobart site nominally expired on 30 November 2003; however, it will continue in force until replaced by a new agreement. Negotiations are currently underway in relation to a

new enterprise agreement at Hobart. The enterprise agreement at Port Pirie is due to expire on 30 November 2004. Current arrangements will remain in place until that time. The Rosebery enterprise agreement is current. Its expiry date is 1 August 2004.

At Century and ARA, the terms and conditions of employment for a significant number of employees are covered by Federal AWAs.

Approximately one third of the employees at Zinifex group's sites, principally in "white collar" positions, are not covered by an industrial instrument such as an award or enterprise agreement. They are employed pursuant to common law contracts.

Market Disclosures and Reporting

As a company listed on the ASX, Zinifex Limited must comply with the continuous disclosure requirements imposed on it under the ASX Listing Rules and the Australian Corporations Act. Continuous disclosure requires the market to be informed of materially price sensitive information in a timely manner.

The ASX Listing Rules require that mining production and exploration companies also report to the market on a quarterly basis on their mining production and development, and exploration activities, together with a summary of the expenditure incurred on those activities.

All public reporting (such as these quarterly reports) must be prepared in accordance with the JORC Code. The JORC Code sets out the minimum standards, recommendations and guidelines for public reporting of exploration results, mineral resources and ore reserves in Australia.

The JORC Code recognises a fundamental division between resources and reserves.

Resources are based on mineral occurrences that have reasonable prospects for eventual economic extraction, and which are known, estimated or interpreted from specific geological evidence and knowledge. Resources are divided into inferred, indicated and measured categories, reflecting an increasing level of geological knowledge and confidence.

Ore reserves are the economically minable part of measured or indicated resources. Ore reserves are divided into probable and proved categories, reflecting an increasing level of geological confidence. They include allowances for dilution and losses during mining. Modifying factors, such as realistically assumed economic, mining, metallurgical, marketing, legal, environmental, social and government factors, must also be considered.

For further information on Zinifex group's reserve and resource estimates and its reporting obligations generally, see "Mineral Reserves and Resource Reporting".

UNITED STATES REGULATORY SUMMARY

Introduction

The business activities of the Company's subsidiaries in the United States (the "U.S. Group") are regulated by various agencies and departments of the U.S. federal government, and various state governments. The following discussion is a summary of certain U.S. federal and state laws and regulations relevant to the operations of the U.S. Group. The following is intended for general information only and does not purport to be a complete analysis of all legal regulation that may be relevant to the U.S. Group. The discussion is based upon certain U.S. federal and state laws and regulations now in effect, all of which are subject to change at any time. Any such change may be applied retroactively in a manner that could adversely affect the U.S. Group.

Mining Law and Mineral Rights

Title to and right to mine hard rock minerals in the United States is governed by the law of each state, except as to public lands of the U.S. federal government that are open to exploration, which are governed by the Mining Law of 1872, as amended. The U.S. Group does not currently conduct mining operations on any federally owned property.

Real property law in the United States is based on the English common law of real property. In general, under the law of each state in the United States, title to minerals and the right to mine are vested in the surface owner, unless separately alienated. The surface owner can transfer all or part of the mineral rights separate from the surface, or can transfer the surface and retain ownership of mineral rights. Mineral rights may be further alienated, may be leased and subleased, and also may be subdivided among more than one owner, including alienation with the disposing party retaining the right to receive royalties or other payments.

If the surface and the mineral rights are held by different persons, state laws vary as to priority and other rights as between the parties. Transfer documents by which the surface and mineral rights were separated may govern. In the absence of agreement or provision in title documentation, in some states, mineral right holders have priority of use and occupancy but must compensate the surface holder for injury to the surface estate. In some states, the mineral right holders have priority of use and no compensation obligation. A few states have private condemnation statutes, which permit holders of mineral rights to exercise the power of eminent domain to secure access to minerals and to provide a portion of the surface for use in the conduct of mining.

Fee exploration and/or mining leases on private properties are obtained from the individual landowners pursuant to negotiations. Generally, leases run from one to ten years, have a negotiated royalty payable to the landowners and often involve an amount of first-year lease bonuses. In addition, fee leases many times require that the lessee engage in exploration and/or mining activities on the acreage within a specified time period.

Environment

General

The U.S. Group is subject to federal, state and local environmental laws that regulate the treatment, storage and disposal of solid and hazardous waste, air emissions and water discharges, and protect natural resources, including threatened and endangered species of wildlife and vegetation. Failure to comply with these regulatory requirements can result in civil and criminal penalties.

Two of the most important environmental laws are the federal Resource Conservation and Recovery Act ("RCRA") and the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA" or "Superfund"). RCRA regulates the treatment, storage and disposal of solid and hazardous wastes and establishes requirements for cleaning up contamination arising from the management of solid and hazardous wastes.

CERCLA imposes joint and several liability for clean-up, without regard to fault, on the current owner or operator of contaminated property as well as any other person who owned the contaminated property at the time hazardous substances were disposed of there.

Environmental laws change frequently. Changes to environmental laws may materially affect the operations of the U.S. Group and the cost of conducting business.

Ongoing Operations

Certain of the U.S. Group's operations are subject to air emission limitations required by the federal Clean Air Act and implementing state programmes. In addition, under the federal Clean Water Act and similar state programmes, the U.S. Group is required to obtain and comply with permits under the EPA's National Pollutant Discharge Elimination System for discharges of certain pollutants into navigable waters.

The U.S. Group either sells as by-products or recycles certain materials generated by its refining operations. The residue generated by the refinery (but not sold) and the tailings generated by the U.S. Group's previous mining operations are stored in impoundments. The U.S. Group has always managed its process waste as "non-hazardous solid waste" in reliance upon the "Bevill Amendments" to the RCRA, which exempt wastes generated from certain mineral processing activities from classification as "hazardous waste". In May 2002, state and federal environmental authorities conducted a site inspection at the Clarksville facility as a part of an ongoing investigation of whether the U.S. Group's materials storage, recycling and disposal practices violate applicable hazardous waste regulations. In July 2003, the Office of Solid Waste of the USEPA made the determination that leaching residues are excluded from the definition of hazardous waste pursuant to RCRA. No violations of RCRA were discovered.

Remediation Obligations

Under CERCLA, the U.S. Group could be required to remediate contamination from any property it currently owns or operates, any property it formerly owned or operated at the time hazardous substances were disposed of there, and any property to which its hazardous substances were transported for treatment or disposal. Liability for such clean-up can be imposed by federal or state authorities, or as a result of litigation by private parties (such as neighbours or subsequent owners) who incur costs in remediating contamination.

In addition, in the event of any future expansion or development of the existing U.S. Group's operations and facilities, any contaminated soils and groundwater that are encountered during the course of construction would need to be managed in accordance with environmental laws.

Employee Safety and Health

The safety and health of the persons employed in the refining operations of the U.S. Group are regulated by the Occupational Safety and Health Administration, while the mining operations of the U.S. Group are subject to the regulatory jurisdiction of the Mine Safety and Health Administration, both of which are agencies of the United States Department of Labor. Present and proposed regulations govern worker exposure to a number of substances and conditions present in work environments. These include dust, mist, fumes, heat and noise. Mining and refining are inherently dangerous activities and the aforementioned agencies have considerable inspection, injunction and penalty powers that if exercised against the U.S. Group could have a material adverse impact on the U.S. Group's financial condition or results of operations.

NETHERLANDS REGULATORY SUMMARY

Introduction

The business activities of the Company's subsidiaries in The Netherlands ("Budel Zink Group") are regulated by various government bodies. The following discussion is a summary of certain current laws of The Netherlands relevant to the operations of the Budel Zink Group. The following is intended for general information only and does not purport to be a complete analysis of all legal regulation that may affect the Budel Zink Group.

Corporate

Book 2 of the Dutch Civil Code ("DCC") regulates corporations and their structures in The Netherlands. The securities industry, the futures industry and related matters are primarily regulated in the 1995 Act on the Supervision of Securities Trade. In addition, there is a variety of subordinate legislation. The supervision of the compliance with the relevant securities legislation is entrusted to The Netherlands Authority for the Financial Markets.

Pasminco Netherlands (Holdings) B.V. is the holding company of the Budel Zink Group, consisting of seven Dutch subsidiary companies.

Property

Dutch land law recognises the private ownership of land under which land rights are freely transferable according to the relevant statutory rules. These rules are mainly contained in Book 5 DCC.

Dutch land law is based on two main forms of land holding, being:

- ownership; and
- ground lease which gives exclusive possession to the holder of the estate for a specified duration.

All titles of ownership and lease holdings are registered in a register administered by the government.

Registration of land rights offers reliable protection for the person receiving the rights and allows a prospective buyer to determine interests others may have in the land.

The Budel Zink Group holds title of ownership to all the land in use by the Budel Zink Group, in addition to which it owns a number of pieces of undeveloped real estate.

Environment

General

Dutch environmental law will have an impact on the ongoing operations of Budel Zink B.V. facilities, any possible expansion or development of these facilities and the possible liability of Budel Zink B.V. to remediate contamination. In the following, the name "Budel Zink" exclusively relates to Budel Zink B.V., in which the majority of operations is incorporated.

Planning and zoning law as well as environmental law have been well developed in The Netherlands. A myriad of regulations has been created, enforcement is rather strict, both by the local authorities (spontaneously or prompted by third parties, for example, neighbours and public interest groups) and by the public prosecutor. A

number of issues are covered in nationwide agreements ("covenants") between the industry and the State, and adopting and living up to a covenant normally means that one is exempted from a regulatory regime regarding the same subject matter (more burdensome than the covenant).

Ongoing Operations

Environmental laws impact upon Budel Zink's existing operations, principally by regulating:

- the emission of pollutants from Budel Zink's facilities;
- the storage of hazardous substances;
- the management, storage and disposal of waste and hazardous substances; and
- the emission of noise and odour.

Breaches of environmental regulations can lead to penalties under the administrative law regime, but also to civil liability and criminal charges. These penalties can include suspension and/or revocation of a licence, the obligation to remediate or contain a contamination, payment of compensation and fines or jail sentences.

Most changes in the law (or its application by the authorities) come from the Regulations and Directives of the European Community (covering topics such as environmental impact assessment and waste transportation) and play an important role in Dutch environmental law. Any changes to environmental laws or regulations may, however, materially affect Budel Zink's operations and its cost structure. It is anticipated that in the future, environmental regulations will become more stringent.

Further Development or Expansion

Environmental laws will also impact upon any future possible development or expansion of the existing Budel Zink operations and facilities. Depending upon the size and nature of any proposed development, the preparation of an environmental impact statement and the application of a building permit may be required which may involve public participation and consultation. This can be a lengthy, time consuming and costly process.

Remediation Obligations

The core piece of legislation is the Soil Protection Act of 1987 ("SPA"). The SPA distinguishes between contamination caused before its inception (1987) and contamination caused since then ("New Cases"). Under the SPA, all persons are under a duty of care to prevent New Cases from occurring and to immediately clean New Cases after their occurrence.

The SPA vests the following powers into the (provincial) SPA authorities to handle cases of contamination that are both serious and urgent:

- issuance of remediation order;
- issuance of containment/investigation order;
- issuance of order to stop (potentially) contaminating activity;
- recovery of costs incurred by the authorities; and
- recovery of increase of value due to government paid remediation under a theory of "unjust enrichment".

Remediation costs can be substantial, especially in the case of a facility like Budel Zink which deals with chemical substances.

Employment Issues

Introduction

Industrial relations (between employer and employee) are comprehensively regulated in The Netherlands. Employees will typically have an individual employment agreement, in addition to which a collective labour agreement, negotiated by the employers' organisation and the unions, contains many additional employment provisions.

Dismissal Protection

Employees are relatively well protected against dismissal, for which either a dismissal permit from a government institution, the Central Organisation of Work and Income (the "CWI") or a court order from the cantonal court must be obtained (in the event an employee is employed on the basis of a contract for an indefinite period of time). If a company intends to dismiss at least 20 employees who are working in the same area within a period of three months, the Act on the Notification of Collective Dismissals ("ANCD") is applicable. According to the ANCD, the employer will have to notify the CWI of the intended dismissals. Furthermore, the employer will have to notify the trade unions concerned of the intended decision and discuss the intended decision and its social consequences with these trade unions. In the event of mass dismissal, a social plan usually provides for financial compensation for those employees who are to be made redundant. A social plan will usually be negotiated with the unions (and/or the works council). Social plans mostly provide for financial compensation or, alternatively, for supplementary payments on top of unemployment benefits for a certain period of time. The amount of financial compensation is generally calculated in accordance with the so-called "cantonal court formula", which is a formula developed by Dutch courts. The age of the employee concerned and the number of years of service are factors that are taken into account to calculate the amount of compensation. In 2001, a social plan which was negotiated with the unions and the works council entered into force at Budel Zink. This social plan was related to the redundancy of 75 employees.

Co-determination

Pursuant to the Works Council Act, the institution of a works council is compulsory for companies in which at least 50 persons are employed. Under the Works Council Act, management must request the prior advice of the works council in respect of specific proposed decisions (and the implementation thereof) on certain business matters. The advice must be requested at such a time that it can still substantially influence the decision to be taken. If management takes a decision that is contrary to the advice of the works council, the works council may file an appeal with the Enterprise Chamber of the Court of Appeal in Amsterdam. Furthermore, management should request the prior approval of the works council in respect of specific proposed decisions concerning the introduction, modification or repeal of "social" regulations within the enterprise. If management takes a decision without the prior approval of the works council, the works council may invoke the nullity of this decision. The works council can request the cantonal court to order management to refrain from actions involving the implementation of a decision which is null and void.

TAXATION

Australian Tax Considerations for Investors in Australian Publicly Listed Companies

The following is a general outline of the main Australian income tax consequences for Tax Non-Residents and Tax Residents who acquire shares in an Australian publicly listed entity. This outline is only intended to provide a general guide to the Australian income tax consequences and on this basis has the following limitations:

- it applies only where the shares are held on capital account and so does not apply to shareholders who hold their shares on revenue account (e.g., shares held by a share trader in the ordinary course of business); and
- it is based on current Australian tax law and does not take into account or anticipate any proposed changes in the law (including changes to legislation or judicial authority).

The Australian tax consequences of an investor acquiring, holding and disposing of shares can vary depending upon the investor's individual circumstances. It is recommended that all investors seek their own independent advice on the income tax consequences of acquiring, holding and disposing of shares in Australian companies based on their own specific circumstances. The comments below are not intended to be advice to investors and should not be relied upon on as such.

Investing in Shares in Australian Publicly Listed Companies

Tax Non-Residents

Shares purchased by Tax Non-Residents will only be CGT assets and therefore subject to the Australian CGT regime only if the Tax Non-Resident, with associates, has an interest in at least 10% of the relevant company at any time during the five years before it disposes of its shares.

Shares purchased by a Tax Non-Resident who is a provident, benefit, superannuation or retirement fund and, at all times during the relevant year of income was a foreign superannuation fund (under section 23(jb) of the Income Tax Assessment Act 1936) (non-resident exempt investors) will be subject to the CGT regime in the same circumstances as other Tax Non-Residents.

Tax Residents: Australian Resident Individuals and Complying Superannuation Funds

Tax Residents who are individuals or complying superannuation funds will hold their shares as CGT assets. Any dealing with the Shares will therefore be subject to the Australian CGT regime. The amount paid for shares will be taken into account in calculating the CGT cost base in the Shares.

Tax Residents: Companies

Shares purchased by a Tax Resident company will be CGT assets. Any dealing with the Shares will therefore be subject to the Australian CGT regime. The amount paid for the Shares will be taken into account in calculating the company's CGT cost base in the Shares.

Returns of Capital

In this summary, we have assumed that any returns of capital made by the relevant company to an individual shareholder or a complying superannuation fund (also referred to as a "shareholder" below) in respect of the Shares will be effected as an "equal reduction" of capital for the purposes of the Australian Corporations Act. This means that, among other things, the terms of the capital return will apply proportionately and will be the same for each shareholder. We have also assumed that the reduction will not involve a cancellation of shares, and will be debited to the relevant company's share capital account.

Tax Non-Residents

As noted above, Tax Non-Residents will only be subject to CGT if they (with their associates) have an interest in at least 10% of a publicly listed Australian company at any time during the five years before the disposal of their shares in the company. A return of capital received by a Tax Non-Resident who falls within this category will be treated the same way as an individual.

Returns of capital received by a Tax Non-Resident that does not fall within this category will not be subject to CGT.

Tax Residents: Australian Resident Individuals and Complying Superannuation Funds

From a tax perspective, a return of capital on shares is not generally included in the assessable income of the Tax Resident shareholder. Instead, a return of capital is a CGT event for the shareholder and has the effect of reducing the shareholder's cost base in its shares by the amount of capital returned.

Where multiple capital returns are made on a share, the total amount of the returns may be greater than the shareholder's CGT cost base in the share. In that case, the excess of the returns over the cost base will be taxable as a capital gain. If the individual or the complying superannuation fund has held the Shares for at least 12 months, the CGT discount provisions may be applicable to this capital gain to reduce the net capital gain (after applying any capital losses) by 50% or 33 ⅓% respectively.

Different tax implications will arise if the return is paid from (debited to) a share capital account which is 'tainted' for income tax purposes. The relevant company should advise shareholders at the time of making the capital return, if this is the case.

In addition, there are specific anti-avoidance rules in the Australian tax law that can apply where a company pays a return of capital in substitution for a dividend (sections 45B and 45C of the Income Tax Assessment Act 1936). If these rules apply to a return of capital, they will deem the return to be a dividend.

The application of these anti-avoidance rules is complex and ultimately a question of fact. Accordingly, their application to a return of capital which is undertaken by the relevant company will ultimately depend on the circumstances in existence at that time.

For example, the anti-avoidance rules might apply if a company makes a capital return to shareholders ("capital benefit") which gives rise to a "tax benefit" to shareholders, and the company's purpose in providing the capital benefit was to provide that tax benefit to shareholders. If the rules apply, the capital benefit is deemed to be an unfranked dividend.

In determining whether the anti-avoidance rules will apply, the following factors will need to be considered at the time the return of capital is made:

- the extent to which the return of capital is attributable to capital or the extent to which the return of capital is attributable to profits (realised and unrealised) of the company or of an 'associate' (as defined in the Income Tax Assessment Act 1936) of the company;
- the pattern of distributions of dividends, bonus shares and returns of capital or share premium by the company or by an associate of the company;
- whether the "relevant taxpayer" (for example, shareholders in the example provided above) has capital losses that, apart from the scheme, would be carried forward to a later year of income;
- whether some or all of the ownership interests in the company or in an associate of the company held by the "relevant taxpayer" were acquired, or are taken to have been acquired, by the "relevant taxpayer" before 20 September 1985;

- whether the relevant taxpayer is a non-resident;
- whether the cost base (for the purposes of the Income Tax Assessment Act 1997) of the relevant ownership interest is not substantially less than the value of the return of capital;
- whether the relevant taxpayer or an associate of the taxpayer is a private company that would not have been entitled to a rebate under section 46F if the taxpayer had been paid an equivalent dividend instead of the return of capital;
- if the scheme involves the distribution of share capital or share premium – whether the interest held by the relevant taxpayer after the distribution is the same as the interest would have been if an equivalent dividend had been paid instead of the distribution of share capital or share premium; and
- any of the matters taken into account in applying the general anti-avoidance provisions in the Income Tax Assessment Act 1936.

It is usual for companies contemplating a capital return to shareholders, to apply to the Commissioner of Taxation for a "Class Ruling" to confirm the capital treatment of the return.

Tax Residents: Companies

The Australian income tax consequences for a Tax Resident company of receiving a return of capital are broadly the same as for individual shareholders.

However, a Tax Resident company will not be entitled to any discount on its net capital gains. Please refer to "Tax: Non-Residents" above for further information.

Receipt of Dividends

Tax Non-Residents

To the extent a dividend received by a Tax Non-Resident on its shares is franked, the dividend will not be subject to tax in Australia. To the extent that a dividend is unfranked, however, it will be subject to Australian dividend withholding tax at a flat rate of 30%, unless the rate is reduced as a result of an agreement with the country in which the Tax Non-Resident is resident.

In the case of U.S. residents who hold less than 10% interest in the relevant company and residents of other countries with which Australia has a double taxation treaty or agreement, the rate of dividend withholding tax is 15%. Lower rates apply for U.S. residents who hold 10% or more.

Neither franked nor unfranked dividends received by Tax Non-Residents that are non-resident exempt investors holding shares will be taxable in Australia, nor will they be subject to dividend withholding tax.

Tax Residents: Australian Resident Individuals and Complying Superannuation Funds

Dividends received by Tax Residents that are individual resident shareholders and complying superannuation funds are included in their assessable income. The "grossed up" amount of any imputation credit attaching to the dividend must also be included in their assessable income.

To the extent the dividend is franked, both individual shareholders and complying superannuation funds will receive a tax offset (rebate) which can be applied to reduce their tax liability for the income year in which the dividend is paid. In some circumstances, individuals and complying superannuation funds who receive imputation credits in excess of their tax liability for the income year will be entitled to a refund from the Australian Taxation Office of the amount of the excess imputation credits.

There are certain rules that limit the availability of imputation credits in certain circumstances (e.g., being required to have held the Shares at risk for at least 45 days) (the "45 Day Rule"). These rules are complex and if individual investors or complying superannuation funds consider that the rules might apply to them, they should consult their taxation adviser regarding their operation.

Tax Residents: Companies

Dividends received by a Tax Resident company on shares in other Australian companies must be included in its assessable income, grossed up for any imputation (franking) credits attaching to the dividend.

To the extent the dividend is franked, the Tax Resident company will receive a tax offset (rebate) which can be applied to reduce its tax liability for the income year in which the dividend is paid. However, a corporate shareholder does not qualify for a refund of excess imputation credits.

In addition, to the extent the dividend is franked, a corporate shareholder must credit its franking account for the amount of the franking credit.

The 45 Day Rule can also apply to a Tax Resident company. Such companies should consult their taxation adviser regarding their operation if it is possible the rules will apply.

Sale of Shares in a Publicly Listed Company

Tax Non-Residents

Tax Non-Residents who, with associates, have an interest in at least 10% of a company at any time during the 5 years before the disposal of their shares in the company, will be subject to CGT upon the sale of their shares in the same way as an individual or a complying superannuation fund. This is discussed further below.

Sale of shares by a Tax Non-Resident who does not fall within this category will not be subject to CGT.

Tax Residents: Australian Resident Individuals and Complying Superannuation Funds

A disposal of shares by a Tax Resident who is an individual or a complying superannuation fund will trigger a taxable capital gain to the extent that the capital proceeds received from the sale exceed the shareholder's CGT cost base in the shares. Broadly, the cost base will be equal to the amount paid for the shares plus any incidental costs incurred (for example, brokerage fees), less the amount of any capital returns that have been made on the shares. Any net capital gain (*i.e.*, after offsetting against any capital losses) realised in respect of the disposal of the shares will be included in the shareholder's assessable income for the relevant tax year. If the shares have been held by the Tax Resident individual shareholder or a complying superannuation fund for at least 12 months, a 50% or a 33⅓% discount respectively may be applicable to the net capital gain.

If the capital proceeds received are less than the reduced cost base in the shares, a capital loss will be triggered. This capital loss may be able to be offset against other capital gains derived by the Tax Resident individual or the complying superannuation fund in the same tax year or be carried forward and offset against future capital gains.

Tax Residents: Companies

The Australian income tax consequences of Tax Resident companies disposing of shares in another Australian company will be essentially the same as for individuals and complying superannuation funds.

However, no CGT discount is available to corporate shareholders on their net capital gains.

United States Federal Income Taxation

This section describes the material United States federal income tax consequences of owning shares. It applies to you only if you acquire your Shares in this Offering and you hold your Shares as capital assets for tax purposes. This section does not apply to you if you are a member of a special class of holders subject to special rules, including:

- a dealer in securities;
- a trader in securities that elects to use a mark-to-market method of accounting for your securities holdings;
- a tax-exempt organisation;
- a life insurance company;
- a person liable for alternative minimum tax;
- a person that actually or constructively owns 10% or more of our voting stock;
- a person that holds shares as part of a straddle or a hedging or conversion transaction; or
- a U.S. holder whose functional currency is not the US dollar.

This section is based on the Internal Revenue Code of 1986, as amended, its legislative history, existing and proposed regulations, and published rulings and court decisions all as currently in effect, as well as on the convention between the Government of the United States of America and the Government of Australia for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income (the "Treaty"). These laws are subject to change, possibly on a retroactive basis.

You are a U.S. holder if you are a beneficial owner of shares and you are:

- a citizen or resident of the United States;
- a domestic corporation or any other entity treated as a domestic corporation for U.S. income tax purposes;
- an estate whose income is subject to United States federal income tax regardless of its source; or
- a trust if a United States court can exercise primary supervision over the trust's administration and one or more United States persons are authorized to control all substantial decisions of the trust.

A "non-U.S. holder" is a beneficial owner of shares that is not a United States person for United States federal income tax purposes.

You should consult your own tax adviser regarding the United States federal, state and local tax consequences of owning and disposing of shares in your particular circumstances.

Taxation of Dividends

U.S. Holders

Under the United States federal income tax laws, and subject to the passive foreign investment company, or PFIC rules discussed below, if you are a U.S. holder, you must include in your gross income the gross amount of any dividend we pay out of our current or accumulated earnings and profits (as determined for United States

federal income tax purposes). If you are a non-corporate U.S. holder, dividends paid to you before 2009 that constitute qualified dividend income may be taxable to you at a maximum tax rate of 15% provided that you hold the Shares for more than 60 days during the 120-day period beginning 60 days before the ex-dividend date and meet other holding period requirements. Dividends we pay with respect to the Shares generally will be qualified dividend income. You must include any Australian tax withheld from the dividend payment in this gross amount even though you do not in fact receive it. The dividend is ordinary income that you must include in income when you receive the dividend, actually or constructively. The dividend will not be eligible for the dividends-received deduction generally allowed to U.S. corporations in respect of dividends received from other U.S. corporations. The amount of the dividend distribution that you must include in your income as a U.S. holder will be the US dollar value of the Australian dollar payments made, determined at the spot A$/US$ exchange rate on the date the dividend distribution is includible in your income, regardless of whether the payment is in fact converted into US dollars. Generally, any gain or loss resulting from currency exchange fluctuations during the period from the date you include the dividend payment in income to the date you convert the payment into US dollars will be treated as ordinary income or loss and will not be eligible for the special tax rate applicable to qualified dividend. The gain or loss generally will be income or loss from sources within the United States for foreign tax credit limitation purposes. Distributions in excess of current and accumulated earnings and profits, as determined for United States federal income tax purposes, will be treated as a non-taxable return of capital to the extent of your basis in the Shares and thereafter as capital gain.

Subject to certain limitations, the Australian tax withheld in accordance with the Treaty and paid over to Australia will be creditable against your United States federal income tax liability. To the extent a refund of the tax withheld is available to you under Australian law or under the Treaty, the amount of tax withheld that is refundable will not be eligible for credit against your United States federal income tax liability.

Dividends will be income from sources outside the United States, but generally will be "passive income" or "financial services income" which is treated separately from other types of income for purposes of computing the foreign tax credit allowable to you.

Non-U.S. Holders

If you are a non-U.S. holder, dividends paid to you in respect of your Shares will not be subject to United States federal income tax unless the dividends are "effectively connected" with your conduct of a trade or business within the United States, and the dividends are attributable to a permanent establishment that you maintain in the United States if that is required by an applicable income tax treaty as a condition for subjecting you to United States taxation on a net income basis. In such cases, you generally will be taxed in the same manner as a U.S. holder. If you are a corporate non-U.S. holder, "effectively connected" dividends may, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or at a lower rate if you are eligible for the benefits of an income tax treaty that provides for a lower rate.

Taxation of Capital Gains

U.S. Holders

Subject to the PFIC rules discussed below, if you are a U.S. holder and you sell or otherwise dispose of your Shares, you will recognise capital gain or loss for United States federal income tax purposes equal to the difference between the US dollar value of the amount that you realise and your tax basis, determined in US dollars, in your Shares. Capital gain of a non-corporate U.S. holder that is recognised before 2009 is generally taxed at a maximum rate of 15% where the property is held more than one year. The gain or loss will generally be income or loss from sources within the United States for foreign tax credit limitation purposes.

Non-U.S. Holders

If you are a non-U.S. holder, you will not be subject to United States federal income tax on gain recognised on the sale or other disposition of your Shares unless:

- the gain is "effectively connected" with your conduct of a trade or business in the United States, and the gain is attributable to a permanent establishment that you maintain in the United States if that is required by an applicable income tax treaty as a condition for subjecting you to United States taxation on a net income basis; or

- you are an individual, you are present in the United States for 183 or more days in the taxable year of the sale and certain other conditions exist.

If you are a corporate non-U.S. holder, "effectively connected" gains that you recognise may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or at a lower rate if you are eligible for the benefits of an income tax treaty that provides for a lower rate.

Passive Foreign Investment Company Rules

We believe that the Shares will not be treated as stock of a PFIC for United States federal income tax purposes, but this conclusion is a factual determination that is made annually and thus may be subject to change. If we were to be treated as a PFIC, unless a U.S. holder effectively elects to be taxed annually on a mark-to-market basis with respect to our Shares, any gain realised on the sale or other disposition of your Shares would in general not be treated as capital gain. Instead, if you are a U.S. holder, you would be treated as if you had realised such gain and certain "excess distributions" rateably over your holding period for the Shares and would be taxed at the highest tax rate in effect for each such year to which the gain was allocated, together with an interest charge in respect of the tax attributable to such year. In addition, dividends that you receive from us will not be eligible for the special tax rates applicable to qualified dividend income if we are a PFIC either in the taxable year of the distribution or the preceding taxable year, but instead will be taxable at rates applicable to ordinary income.

Backup Withholding and Information Reporting

If you are a non-corporate U.S. holder, information reporting requirements, on Internal Revenue Service Form 1099, generally will apply to:

- dividend payments or other taxable distributions made to you within the United States; and

- the payment of proceeds to you from the sale of shares effected at a U.S. office of a broker.

Additionally, backup withholding may apply to such payments if you are a non-corporate U.S. holder that:

- fails to provide an accurate taxpayer identification number;

- is notified by the Internal Revenue Service that you have failed to report all interest and dividends required to be shown on your federal income tax returns; or

- in certain circumstances, fails to comply with applicable certification requirements.

If you are a non-U.S. holder, you are generally exempt from backup withholding and information reporting requirements with respect to:

- dividend payments we made to you outside the United States; and

- other dividend payments and the payment of the proceeds from the sale of shares effected at a United States office of a broker, as long as the income associated with such payments is otherwise exempt from United States federal income tax, and:

- the payor or broker does not have actual knowledge or reason to know that you are a United States person and you have furnished the payor or broker:

- an Internal Revenue Service Form W-8BEN or an acceptable substitute form upon which you certify, under penalties of perjury, that you are a non-United States person; or

- other documentation upon which it may rely to treat the payments as made to a non-United States person in accordance with U.S. Treasury regulations; or

- you otherwise establish an exemption.

Payment of the proceeds from the sale of shares effected at a foreign office of a broker generally will not be subject to information reporting or backup withholding. However, a sale of shares that is effected at a foreign office of a broker will be subject to information reporting and backup withholding if:

- the proceeds are transferred to an account maintained by you in the United States;

- the payment of proceeds or the confirmation of the sale is mailed to you at a United States address; or

- the sale has some other specified connection with the United States as provided in U.S. Treasury regulations,

unless the broker does not have actual knowledge or reason to know that you are a United States person and the documentation requirements described above are met or you otherwise establish an exemption.

In addition, a sale of shares effected at a foreign office of a broker will be subject to information reporting if the broker is:

- a U.S. person;

- a controlled foreign corporation for United States tax purposes;

- a foreign person 50% or more of whose gross income is effectively connected with the conduct of a U.S. trade or business for a specified three-year period; or

- a foreign partnership, if at any time during its tax year:

- one or more of its partners are "U.S. persons", as defined in U.S. Treasury regulations, who in the aggregate hold more than 50% of the income or capital interest in the partnership, or

- such foreign partnership is engaged in the conduct of a U.S. trade or business,

unless the broker does not have actual knowledge or reason to know that you are a U.S. person and the documentation requirements described above are met or you otherwise establish an exemption. Backup withholding will apply if the sale is subject to information reporting and the broker has actual knowledge that you are a United States person.

You generally may obtain a refund of any amounts withheld under the backup withholding rules that exceed your income tax liability by filing a refund claim with the United States Internal Revenue Service.

NOTICE TO INVESTORS

Because of the following restrictions, you are advised to consult legal counsel prior to making any offer, resale, pledge or transfer of Shares except in regular way transactions on the ASX.

The Shares have not been registered under the Securities Act or any U.S. state or other securities laws. The Shares may not be offered, sold or otherwise transferred except (i) in compliance with the registration requirements of the Securities Act and any other applicable securities laws or (ii) pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and any other applicable securities laws.

Accordingly, the Shares are being offered and sold only (i) in the United States to qualified institutional buyers ("QIBs") in reliance upon Rule 144A under the Securities Act and applicable state securities laws and (ii) outside the United States in compliance with Regulation S under the Securities Act and the applicable laws of the jurisdiction where those offers and sales occur.

Purchasers in the United States

Each purchaser of Shares in the United States will be deemed to have represented, warranted and agreed as follows:

(1) It is a QIB, it is aware that the seller of the Shares may be relying on the exemption from the registration requirements of the Securities Act provided by Rule 144A and it is acquiring the Shares for its own account or for the account of one or more QIBs for whom it is authorised to act;

(2) It understands that the Shares have not been and will not be registered under the Securities Act and may be offered, sold, pledged or otherwise transferred only (i) outside the United States in an offshore transaction meeting the requirements of Rule 903 or Rule 904 of Regulation S or (ii) pursuant to an exemption from registration under the Securities Act provided by Rule 144 thereunder (if available) or (iii) to a person whom it reasonably believes is a QIB in a transaction meeting the requirements of Rule 144A or (iv) pursuant to an effective registration statement under the Securities Act covering the Shares, in each case in accordance with any applicable securities laws of any state of the United States or other jurisdiction; and

(3) It will not deposit such Shares into any unrestricted depositary receipt facility in respect of the Shares established or maintained by a depositary bank unless and until such time as such Shares are no longer "restricted securities" within the meaning of Rule 144(a)(3) under the Securities Act.

The foregoing shall not prohibit any sale of Shares in regular way transactions on the ASX if neither the seller nor any person acting on its behalf knows, or has reason to know, that the sale has been prearranged with, or that the purchaser is, a person in the United States.

Purchasers Outside the United States

Each purchaser of Shares outside the United States will be deemed to have (i) acknowledged that the Shares have not been, and will not be, registered under the Securities Act and may not be offered, sold or resold in, or to persons in, the United States except in accordance with an available exemption from registration and (ii) represented, warranted and agreed as follows:

(1) It (a) is not in the United States and (b) is not and is not acting for the account or benefit of, a U.S. person (as such term is defined in Regulation S); and

(2) It is not engaged in the business of distributing securities or, if it is, it agrees that it will not offer or resell in, or to persons in, the United States (a) any Shares it acquires in the Offering at any time or (b) any Shares it acquires other than in the Offering until 40 days after the date on which the Final Price is determined and the Shares are allocated in the Offering, in either case other than in a transaction meeting the requirements of Rule 144A; provided, however, that the foregoing shall not prohibit any sale of Shares in regular way transactions on the ASX if neither the seller nor any person acting on its behalf knows, or has reason to know, that the sale has been prearranged with, or that the purchaser is, a person in the United States.

All Purchasers in the Global Institutional Offering

Each purchaser of Shares in the Global Institutional Offering will also be deemed to have acknowledged and agreed that:

(1) It is relying on this Institutional Offering Memorandum in conducting its examination of our Company and the terms of the Offering, including the merits and risks involved, and in making an investment decision regarding the Shares; and

(2) No person is authorised to give any information or make any representations other than those contained in this Institutional Offering Memorandum and, if given or made, such information or representations will not be relied upon as having been authorised by us, the Administrators or the Joint Lead Managers nor will any such persons have any liability or responsibility therefor.

SELLING SHAREHOLDER

The seller of the Shares in the Offering is Pasminco Holdings. Pasminco Holdings is a wholly-owned subsidiary of Pasminco. The Administrators control Pasminco prior to the Offering. The Administrators conduct the administration of Pasminco for the benefit of its creditors. A few of the creditors are affiliated with the Joint Lead Managers.

Based upon information available to the Administrators as of 27 February 2004, the composition of creditors of Pasminco Limited holding in excess of 5% of the outstanding claims against Pasminco Limited was as follows:

Name of Creditor	Percentage of Outstanding Claims
Citigroup	12.2%
Farallon Capital	11.2
Pirie Silver Company Pty Ltd	9.8
Commonwealth Bank of Australia	9.4
Deutsche Bank AG	9.3
ANZ Banking Group	8.1
Westpac Banking Corporation	6.1
UBS AG	5.5

Not all of the claims described above have been finalised, and they remain subject to change. In calculating the percentage of outstanding claims held by each of the creditors, we have included each creditor's beneficial interest in claims held by other creditors where such beneficial interest has been made known to the Administrators.

The Offering involves the offer and sale of all of Zinifex's ordinary shares to be owned by Pasminco Holdings. If, as expected, all Shares are sold, then Pasminco Holdings would not own any ordinary shares of Zinifex upon completion of the Offering.

Excluding creditors who are affiliated with a Joint Lead Manager, Deed Creditors may participate in the Initial Priority Entitlement and the Bookbuild Priority Allocation and, thus, could collectively own up to 100 million Zinifex shares upon completion of the Offering. Farallon Capital, as well as some other creditors, have exercised their right to participate in the Initial Priority Entitlement and may be granted a priority allocation in the Offering. If successful, depending on the Final Price, Farallon Capital may hold in excess of 5% of Zinifex's outstanding share capital upon completion of the Offering. See "The Offering" and "Risk Factors – The participation of the creditors in the bookbuild for the Offering may affect the pricing of the Offering and the aftermarket trading in the Shares."

The total allocation made to any individual creditor and its affiliates for their own account in (i) the Initial Priority Entitlement, (ii) the Bookbuild Priority Allocation or (iii) the Bookbuild will be limited to a maximum of 10% of the overall issued capital of Zinifex.

Some of the creditors of Pasminco Limited have agreed to provide us with a 364 day working capital facility following completion of the Offering. These creditors are Australia and New Zealand Banking Group Limited, Deutsche Bank AG (Sydney Branch), National Australia Bank Limited, Societe Generale, Australia Branch and Westpac Banking Corporation. In addition to the establishment fee of 2% and the line fee of 1%, these creditors were a paid a 3% fee by the residual group in connection with the provision of this facility.

PLAN OF DISTRIBUTION

Selling Agreement

Zinifex, Pasminco Holdings, Pasminco Limited and its subsidiary Pasminco Finance Limited ("PFL") have entered into the Selling Agreement with the Joint Lead Managers in connection with the offer and sale of the Shares. Pursuant to the Selling Agreement, the Shares are being offered in the Global Institutional Offering through a bookbuild process (i) in the United States to QIBs in reliance on Rule 144A and (ii) outside the United States to institutional investors in Australia and the rest of the world in reliance on Regulation S. Shares will also be offered in the Australian Retail Offering in reliance on Regulation S.

The Final Price will be determined by the Pricing Committee in consultation with the Administrators and representatives of the Joint Lead Managers after the close of the Bookbuild. Creditors of Pasminco Limited may bid for Shares in the Bookbuild. See "The Offering".

The Shares in the Global Institutional Offering will be sold at the Final Price. After the Shares are sold, the Joint Lead Managers may vary the selling terms for any Shares they hold. Investors in the Australian Retail Offering will pay a price per Share that is the lower of the Retail Application Price and a discount of A$0.10 to the Final Price.

Subject to the successful completion of the bookbuild and customary closing conditions, each Joint Lead Manager will underwrite the settlement of one third of the Shares sold. Each Joint Lead Manager will procure purchases for, or purchase themselves, one third of the Shares sold to investors outside the United States and, with respect to Shares being sold to QIBs, the Joint Lead Managers will purchase and resell such Shares. The Selling Agreement provides that, in the event of termination of the Selling Agreement by a Joint Lead Manager, the purchase commitments of the other Joint Lead Managers may be increased or the Selling Agreement may be terminated by the other Joint Lead Mangers.

Pasminco Holdings has agreed to pay the Joint Lead Managers a total selling fee of 3.25% of the gross proceeds from the sale of the Shares, except those Shares sold in the Employee Offering and to creditors that submit bids prior to the date of this Institutional Offering Memorandum. Also subject to this exception, Pasminco Holdings may pay incentive fees of up to 0.50% of the gross proceeds from the sale of the Shares.

Pasminco Holdings has also agreed to reimburse the Joint Lead Managers for certain of their expenses incurred in connection with this Offering, including fees and disbursements of their counsel. The Selling Agreement provides that Zinifex, Pasminco Holdings, Pasminco Limited and PFL will jointly and severally indemnify the Joint Lead Managers against certain liabilities, including liabilities incurred in connection with this Institutional Offering Memorandum and the Australian Retail Prospectus.

Each of Zinifex, Pasminco Holdings, Pasminco Limited and PFL has agreed that during the period of 180 days from the closing of the Offering it will not, without the prior written consent of the Joint Lead Managers, allot, agree to allot or indicate in any way that it may or will allot any equity securities or securities that are convertible into equity or that represent the right to receive equity of Zinifex or Pasminco Holdings. However, the Joint Lead Managers have agreed that Zinifex may allot Zinifex ordinary shares under its ESAP and ESP on the terms set out in this Institutional Offering Memorandum.

See also "Additional Information – Selling Agreement".

Interests of the Joint Lead Managers

Each Joint Lead Manager or one of its affiliates is a Deed Creditor of Pasminco and, thus, will receive a proportionate share of the proceeds from the Offering. Citigroup, Deutsche Bank and UBS AG hold 12.2%, 9.3% and 5.5% of the outstanding claims against Pasminco Limited, respectively.

Deed Creditors affiliated with the Joint Lead Managers will be members of the Pricing Committee. However, no Deed Creditor affiliated with the Joint Lead Managers will be entitled to participate in the (i) the Initial Priority Entitlement, (ii) the Bookbuild Priority Allocation or (iii) the Bookbuild. Other affiliates of the Joint Lead Managers that are not Deed Creditors may participate in the Bookbuild provided they have not communicated with any member of the Pricing Committee in relation to the Offering. See "The Offering".

Citigroup and Deutsche Bank are financiers under the Summit Facility, which will be repaid from the proceeds of this Offering. In addition, our new A$150 million revolving loan note working capital facility has been negotiated with a group of lenders, including Deutsche Bank.

Certain Joint Lead Managers or their affiliates have performed from time to time and may in the future perform investment banking and financial advisory services for Zinifex or Pasminco Limited. Customary fees and commissions have been paid for such services in the past and are expected to be paid for any services in the future.

Selling Restrictions

Canada (British Columbia, Alberta, Manitoba, Ontario and Québec Only)

This Institutional Offering Memorandum constitutes an offering of the Shares only in those jurisdictions in Canada and to those persons where and to whom they may be lawfully offered for sale, and therein only by persons permitted to sell such securities. This Institutional Offering Memorandum is not, and under no circumstances is to be construed as, an advertisement or a public offering of the securities referred to herein. No securities commission or similar authority in Canada, has reviewed or in any way passed upon this document or upon the merits of the Shares and any representation to the contrary is an offence.

Resale Restrictions

The distribution of Shares in Canada is being made on a private placement basis only and is exempt from the requirement that the Company prepare and file a prospectus with the relevant Canadian regulatory authorities. Any resale of the Shares must be made in accordance with applicable securities laws, which will vary depending on the relevant jurisdiction, and which may require resales to be made in accordance with exemptions from registration and prospectus requirements. Canadian purchasers are advised to seek legal advice prior to any resale of the Shares.

Hong Kong

Each Joint Lead Manager has agreed that it has not offered or sold and will not offer or sell in Hong Kong, by means of any document, any Shares other than to persons whose ordinary business it is to buy or sell shares or debentures (whether as principal or agent) or in circumstances which do not constitute an offering to the public within the meaning of the Companies Ordinance (Cap.32) of Hong Kong, and that, unless it is a person permitted to do so under the securities laws of Hong Kong, it has not issued or had in its possession, and will not issue or have in its possession for the purposes of issue, any advertisement, invitation or document relating to the Shares other than with respect to Shares intended to be disposed of to persons outside Hong Kong or to be disposed of in Hong Kong only to persons whose business involves the acquisition, disposal or holding of securities, whether as principal or agent.

Japan

The Shares have not been and will not be registered under the Securities and Exchange Law of Japan. Each Joint Lead Manager has represented and agreed that the Shares it purchases will be purchased by it as principal and that, in connection with the initial offering of the Shares, it has not offered and sold, and will not offer or sell, any of such shares, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan or to others for offering

or sale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan, except pursuant to an exemption from the registration requirements of the Securities and Exchange Law of Japan and otherwise in compliance with the Securities and Exchange Law and all other applicable laws and regulations of Japan.

New Zealand

Our Shares may not be offered or sold in New Zealand by means of this Institutional Offering Memorandum or otherwise except to persons whose principal business is the investment of money or who, in the course of and for the purposes of their business, habitually invest money, as defined in Section 3(2)(a)(ii) of the New Zealand Securities Act 1978. Any shares acquired must not be acquired by or for any person, for the purpose of resale, other than to a person who fulfils the above criteria.

Singapore

This Institutional Offering Memorandum has not been and will not be registered as a prospectus with the Monetary Authority of Singapore and the Shares will be offered in Singapore pursuant to an exemption invoked under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "Securities and Futures Act"). Accordingly, each syndicate member acknowledges that the Shares may not be offered or sold, or be made the subject of an invitation for subscription or purchase, nor may this Institutional Offering Memorandum or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Shares be circulated or distributed, whether directly or indirectly, to the public or any member of the public in Singapore other than to an institutional investor or other person specified in Section 274 of the Securities and Futures Act.

United Kingdom

This Institutional Offering Memorandum has been distributed on a confidential basis to persons whose ordinary activities involve that person in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their business or otherwise in circumstances such that the distribution or offer of the Shares does not and will not constitute an offer to the public (within the meaning of the Public Offers of Securities Regulations 1995 of the United Kingdom) and this Institutional Offering Memorandum does not comprise, and should not be construed as comprising, a prospectus within the meaning of the Public Offers of Securities Regulations 1995. This Institutional Offering Memorandum should not be distributed, published or reproduced, in whole or in part, nor should its contents be disclosed by recipients to any other person.

This Institutional Offering Memorandum is being distributed by the Joint Lead Managers only to, and is directed at (i) persons who have professional experience in matters relating to investments falling within Article 19(1) of the Financial Services and Markets Act 2000 (Financial Promotions) Order 2001 and (ii) persons to whom it may otherwise be lawfully communicated (together, "relevant persons"). The Shares offered by this Institutional Offering Memorandum are available only to, and any invitation, offer or agreement to purchase our Shares will be engaged in only with, relevant persons. Any person who is not a relevant person must not act or rely on this Institutional Offering Memorandum or any of its contents.

United States

Through their U.S. broker-dealer affiliates, the Joint Lead Managers have agreed to sell Shares acquired by them in the United States only to persons reasonably believed by them to be QIBs in reliance on Rule 144A under the Securities Act.

The Shares have not been and will not be registered under the Securities Act and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons, except in certain transactions exempt from, or not subject to, the registration requirements of the Securities Act.

Each Joint Lead Manager has agreed that it will not offer, sell or deliver our Shares (i) as part of its distribution at any time, or (ii) otherwise until 40 days after the date on which the Final Price is determined and the Shares are allocated in the Offering (the "Restricted Period") within the United States or to, or for the account or benefit of, U.S. persons, other than to QIBs in reliance on Rule 144A under the Securities Act, and it will have sent to each distributor, dealer or person receiving a selling concession, fee or other remuneration to which it sells our Shares during the Restricted Period a confirmation or other notice setting forth the restrictions on offers and sales of our Shares within the United States or to, or of the account or benefit of, U.S. persons. Terms used in this paragraph have the meanings given to them by the Securities Act and Regulation S thereunder.

In addition, until 40 days after the commencement of the Offering, an offer or sale of our Shares within the United States by any dealer (whether or not participating in the Offering) may violate the registration requirements of the Securities Act if such offer or sale is made otherwise than in accordance with Rule 144A.

In this section of the Institutional Offering Memorandum, the term "U.S. person" means (i) any individual resident in the United States, (ii) any corporation, pension, profit-sharing or other trust or other entity (including any such entity constituting an investment adviser acting with discretionary authority) whose office most directly involved with the purchase is located in the United States or (iii) any other person who is a "U.S. person" as such term is defined in Regulation S.

Other Jurisdictions

The Shares may not be offered or sold in any other jurisdiction by means of this Institutional Offering Memorandum or otherwise, except to persons to whom such offer, sale or distribution is permitted under applicable law.

MINERAL RESERVES AND RESOURCE REPORTING

It is a requirement of the ASX Listing Rules that reporting of ore reserves and resources in Australia must comply with the "Australasian Code for Reporting of Mineral Resources and Ore Reserves". This Code is further subtitled "Prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists, and Minerals Council of Australia (JORC)", and is commonly referred to as the "JORC Code". Reporting in accordance with the JORC Code became mandatory in 1989, and the edition of the JORC Code currently in force is dated September 1999.

The JORC Code recognises a fundamental division between resources and reserves. Resources are based on mineral occurrences quantified on the basis of geological data and an assumed cut-off grade, and are divided into measured, indicated and inferred categories reflecting decreasing confidence in geological and grade continuity. No allowances are included for dilution and losses during mining, but the reporting of resource estimates carries the implication that there are reasonable prospects for eventual economic exploitation. Resources may therefore be viewed as the estimation stage prior to the application of more stringent economic criteria for reserve definition, such as a rigorously defined cut-off grade and mine design outlines, along with allowances for dilution and losses during mining. Under this system of reporting, it is common practice for companies to include in the resource category material with a high expectation of conversion to reserves, but for which final technical and economic viability has not been determined.

The principal difference between the reporting regimes in Australia and the United States is the absence in the United States of any provision for the reporting of estimates other than proven (measured) or probable (indicated) reserves. This contrasts with the reporting of ore reserves, where there is a reasonable degree of congruence between the requirements of the two regimes. See also "Cautionary Note Regarding Forward-Looking Statements".

Ore reserves as defined by the JORC Code are designated as proved and probable, and are derived from the corresponding measured and indicated resource estimates by including allowances for dilution and losses during mining. It is an explicitly stated further requirement that other modifying economic, mining, metallurgical, marketing, legal, environmental, social, and governmental factors also be taken into account. Reporting conventions that may be adopted are to report resource estimates as including that portion separately assigned to the proven and probable category, or to report resources as additional to that portion separately assigned to the proved and probable category.

The reserve and resource estimates provided in this Institutional Offering Memorandum comply with the reserve and resource definitions of the JORC Code. The resource estimates shown include that portion separately assigned to, and presented as, proved and probable reserves.

United States Definitions

Under the current United States requirements as adopted by the SEC in its Industry Guide 7, a "reserve" is defined as "that part of a mineral deposit which could be economically and legally extracted or produced at the time of the reserve determination".

"Proven (measured) reserves" are defined as reserves for which (a) quantity is computed from dimensions revealed in outcrops, trenches, workings or drillholes; grade and/or quality are computed from the results of detailed sampling; and (b) the sites for inspection, sampling and measurement are spaced so closely and the geologic character is so well defined that size, shape, depth and mineral content of reserves are well established.

"Probable (indicated) reserves" are defined as reserves for which quantity and grade and/or quality are computed from information similar to that used for proven (measured) reserves, but the sites for inspection, sampling and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven (measured) reserves, is high enough to assume continuity between points of observation.

LEGAL MATTERS

The validity of the Shares under Australian law will be passed upon by Minter Ellison, legal advisers to Zinifex and Pasminco Holdings Limited. We are also being represented by Sullivan & Cromwell, New York, New York, as to certain matters of United States federal and New York state law. The Joint Lead Managers are being represented by Mallesons Stephen Jaques, as to certain matters of Australian law, and by Jones Day, as to certain matters of United States federal law and New York state law.

ADDITIONAL INFORMATION

Other Material Contracts

Accommodation Village Transaction

Overview

The Century Mine Accommodation Village is comprised of relocatable accommodation, buildings, recreational facilities, civil works and utilities ("Accommodation Assets"). The Accommodation Assets are the subject of interrelated leasing and financing arrangements, summarised in general terms below.

In summary, the Accommodation Assets are leased by from National Australia Bank ("NAB"). Under the terms of a services agreement between SCL and Northern Accommodation Management Pty Ltd ("NAM") ("Services Agreement"), ZCL has the right to use the buildings and equipment which are to be serviced and maintained throughout the term of ten years (expiring on or around July 2008) by NAM. SCL has the right to extend the term of the Services Agreement for an additional five years on the same terms and conditions as long as it gives notice to NAM no later than February 2005.

Leases

NAM leases the Accommodation Assets from NAB under two leases, each with a term of 8 years expiring on or around July 2006. NAM has an option to extend the lease term for a further two years at the same rental. Alternatively, NAM may negotiate with NAB to extend the lease terms by a further seven years. In order for NAM to fulfil its obligations under the Services Agreement, NAM must at least exercise the two year option. SCL has no option to purchase the Accommodation Assets, although it may negotiate with NAB to purchase the Accommodation Assets at the end of the lease term.

NAM meets its rental payment obligations to NAB under the leases from payments made by SCL under the Services Agreement which, generally, requires SCL to pay all rent and a management fee equal to 1% of the rent payable to NAB. NAB's after tax profitability under the leases is protected at SCL's cost, as under the Services Agreement, SCL is obliged to meet all payments owing by NAM to NAB, including any increases in NAB's costs.

NAM grants fixed and floating charges over all of its assets to secure first its obligations to NAB under the leases and secondly, to secure its obligations to SCL under the Services Agreement and the tripartite agreement.

Land Access

With respect to land access, SCL has granted NAB a non-exclusive licence of part of the land on which the Accommodation Village is situated. NAB then sub-licences the land to NAM under the terms of the relevant lease agreements. In turn, NAM then grants a sub-licence to SCL of the same land under the terms of the Services Agreement.

Services Agreement

Under the term of the Services Agreement, NAM is to make the relevant equipment and buildings available for use by SCL. NAM is also obliged to enter into an operations agreement, the terms of which govern the provision of operating services to the Accommodation Assets ("Operations Agreement"). Under the terms of the Service Agreement, NAM also grants to SCL a non-exclusive right to use certain land, for the purpose of enjoying the services, the equipment and the buildings and also an irrevocable non-exclusive licence to use the equipment and buildings situated on the land.

Under the Services Agreement, SCL is obliged to pay to NAM:

- the instalment of rent that is payable by NAM under the relevant leases;
- the amount of any termination value, residual value or any other amount that is payable by NAM to the lessor under the relevant leases;
- all amounts required to be paid to NAM under the Operations Agreement;
- a management fee equal to 1% of each instalment of rent payable.

Eurest is also a party to the Operations Agreement and is to provide various services to the Accommodation Village, including catering, cleaning, janitorial and first aid services. The Operational Agreement expires on 30 June 2004. NAM may, at its option, extend the agreement for a subsequent periods of one year.

Tripartite agreement

In order to protect SCL's commercial interest in the Accommodation Assets, a tripartite agreement between SCL, NAB and NAM ("Tripartite Agreement") gives SCL a limited right to attempt to cure certain of NAM's defaults and, in certain circumstances, to negotiate a 'step-in' to the lease or to nominate another entity to do so.

Under the Tripartite Agreement, SCL indemnifies NAB in respect of losses, liabilities, costs and expenses:

- in connection with any failure by SCL to observe or perform all or any of its obligations under the deed or any other transaction document; and
- which arise under the lease agreements as a result of any failure by NAM to pay any moneys due and owing to the lessor (other than payments outstanding in respect of the obligation of NAM to pay rent, the termination value or any residual value).

A claim under the Accommodation Village Transaction including unpaid and future rental payments is not a settled claim under the deeds of company arrangement referred to in 'Voluntary Administration and Restructuring'.

Trafigura Contracts to purchase Zinc and Lead

Overview

We have entered into contracts with Trafigura B.V. for the sale of:

- lead and zinc produced by Port Pirie; and
- zinc produced at Hobart,

which is in excess of the demand for Zinifex's commodity products from the Australian and New Zealand markets. Premium alloy product (i.e., EZDA) is excluded from this contract.

The Port Pirie contract is linked with a licence that allows Trafigura access to our storage facility located at Port Pirie. Trafigura's storage facility at Hobart is governed by a separate arrangement between Trafigura and the Hobart Port Corporation.

Commodity in relation to Hobart

The commodity is AZ-SHG Zn 99995 Brand LME registered SHG zinc, in the form of ingots.

Commodities in relation to Port Pirie

The commodities are SHG Zn 99995 zinc, in the form of block, and, by a separate contract, Pb 9997 or Pb 9999 LME registered lead or VRLA Refined Lead, in the form of ingots.

Term and termination for each contract

The delivery period for each of the three sale agreements continues from 1 January 2004 until 31 December 2006 inclusive. However, either party may terminate by written notice for force majeure (30 consecutive days, or 60 days in any 180 day rolling period) or other customary events of default.

At the time of termination, if the non-defaulting party's total economic losses and transaction costs (in relation to the termination of the sale contract) vary from its economic gains (in relation to the termination of the sale contract), adjustment mechanisms correct this position up or down, as required to balance these amounts.

Payment and delivery

Customary payment and delivery terms apply to product sales.

Quantity and pricing

Zinifex is only obliged to deliver to Trafigura any residual quantity of the commodity which remains after Zinifex has fulfilled its monthly obligations in relation to direct customer commodity sales.

The commodity delivery period is split over 36 monthly deliveries, each delivery being generally consistent with the rolling production forecast provided by Zinifex, subject to various adjustment mechanisms. However, the acceptance of any excess in the contract weight of each delivery is at the sole discretion of Trafigura.

Pricing is calculated by reference to the average of the specified daily official cash settlement price per metric ton of zinc or lead (as relevant) on the London Metal Exchange, stated in US dollars, for the quotation period, plus an agreed amount.

Zinc Supply Arrangements with Lee Kee

Overview

From 1 February 2004, Zinifex has agreed to exclusively sell to Lee Kee Group Ltd ("Lee Kee") and Lee Kee has agreed to buy EZDA zinc product in the countries of Hong Kong, the People's Republic of China and the Republic of China (Taiwan). Zinifex will sell EZDA product produced by the Hobart smelter under the terms and conditions of a new sales agreement anticipated to be executed by the parties in March 2004. Zinifex's standard export terms and conditions form part of the agreement.

Term and termination

The contract period is one year, commencing on 1 February 2004 and ending on 31 January 2005. Although it is contemplated that Zinifex will use its best efforts during the agreement period to extend the agreement period by a further four years, a longer agreement period is not guaranteed. Zinifex has the benefit of customary termination rights.

Quantity and pricing

The price per tonne of EZDA product is comprised of a base price plus a premium. Lee Kee must nominate firm volumes before the price is fixed with Zinifex.

The base price will be one of or a combination of:

- The London Metal Exchange Official Cash Settlement Quotation for SHG Zinc averaged over any number of days in the chosen quotational period; and
- the previous final close price as quoted on The London Metal Exchange,

where the quotational period is the month prior to the contractual month of shipment.

If the contract is extended, the premium will be fixed for one year periods and negotiated in October prior to the start of the following contract year.

Minimum quantity

Lee Kee is initially obliged to purchase at least 110,000 tonnes of Product per year.

Contract Novation Deeds

A number of contracts to which residual group companies are a party which are needed by the Zinifex group for its continuing business have been identified. It is intended that these contracts will be novated from the relevant residual group company to an appropriate Zinifex group company on or about the completion of the Offering. Generally, the novations will have the effect of transferring the rights and obligations under the contract from the residual group company to the appropriate Zinifex group company with effect from 20 September 2001 (or the commencement date of the contract if that date is later). A similar process will apply to contracts (if any) which need to be transferred from the Zinifex group to a residual group company.

Separation, Transitional and Shared Services Deed

Overview

Zinifex Limited and Pasminco Limited (Subject to Deed of Company Arrangement) have entered into a Separation, Transitional and Shared Services Deed ("Deed").

The Deed encompasses:

- separation arrangements to facilitate the division of the Pasminco Group into the Zinifex group of companies (the "Zinifex Group") and a residual group of companies (the "Residual Group"), with Zinifex Limited to become the ultimate holding company of the Zinifex Group;
- the provision of transitional services by the Zinifex Group to the Residual Group after the separation of the Zinifex Group from the Residual Group; and
- certain other obligations of the parties in the periods before and after the date on which shares in Zinifex Limited are transferred to successful applicants pursuant to the Offering ("Effective Date").

Transitional services

The Deed requires the Zinifex Group to provide the following transitional services to the Residual Group:

- accounting services in relation to the preparation of the Residual Group's financial statements for the year ending 30 June 2004, which are to be provided until those financial statements are complete;
- information technology services, which are to be provided for a period of twelve months from the Effective Date; and
- assistance in relation to occupational health and safety and environmental audits, which is to be provided for a period of twelve months from the Effective Date.

The Deed also contemplates that either Group may provide the other Group with:

- any additional services that are reasonably required by one Group from the other Group, having regard (in particular) to whether a third party would have the relevant knowledge or expertise to provide those services at a reasonable cost, for so long as required (but subject to a 'sunset date' that is 24 months after the Effective Date);

- any other services as agreed between them.

All services are to be provided on a cost recovery basis, including the portion of the service provider's reasonable overheads and expenses (including salaries and on-costs) that is attributable to the provision of the services. For invoicing purposes, the service provider may make a reasonable estimate of the costs of providing services in a particular period, to be adjusted on a quarterly basis once the actual costs are known.

Services may be terminated by the service provider if the other Group fails to make payment for those services by the due date, and then does not rectify the failure within 10 business days after being required to do so.

Contracts to be novated

If a contract has been identified as requiring novation from one Group to the other Group, but has not been novated prior to the Effective Date, the Deed:

- requires each party to continue to do all things reasonably required to novate the contract;

- provides that the benefit of the contract is held on trust by the current party to the contract for the benefit of the proposed new party; and

- obliges the proposed new party to the contract to indemnify the current party for any liabilities incurred by the current party where the circumstances giving rise to those liabilities occurred on or after 20 September 2001.

If the contract has not been novated within 6 months after the Effective Date, the current party may terminate the contract, subject to complying with an agreed period of notice to the proposed new party. Any associated termination costs must be paid by the proposed new party.

If the contract involves the supply of essential goods and services, or the termination costs would be significant, the new party may require the current party to refrain from terminating the contract until further notice. If this delays the winding up of a company in the Residual Group, the new party will be liable for any costs of the Residual Group arising in connection with that delay.

Wrong pockets

The Deed recognises that there may be assets or arrangements which should have been transferred from the Residual Group to the Zinifex Group (or vice versa) but which were not transferred prior to the Effective Date. The Deed sets out mechanisms for transfer of such assets and arrangements in those circumstances.

Reciprocal provisions apply to assets or arrangements held by the Zinifex Group which should have been transferred to the Residual Group.

Access to records

Each Group must retain its business records for at least seven years after the Effective Date (or longer if required to substantiate a tax position) and allow the other Group to access those records for accounting, tax and investigative purposes.

Releases

Each Group agrees to release the other Group from all liabilities the circumstances giving rise to which occurred on or before the Effective Date, other than any liability arising from the terms of various documents associated with the Offering or with the administration of the Deed Companies.

Intellectual property

The Residual Group has agreed to assign to the Ongoing Group all existing intellectual property rights held by companies in the Residual Group (including the rights to the 'Pasminco' name). The Ongoing Group has agreed to grant each Residual Group company a royalty-free licence (including the right to sub-license) to use those intellectual property rights until that company is wound up and deregistered.

Where either Group has the right to use any third party intellectual property rights and those rights are also used by the other Group, the Groups will endeavour to obtain any consents required to license those rights to the other Group.

Information technology systems

Zinifex Limited will control the separation process for information technology systems that are being split between the Residual Group and the Zinifex Group. The Zinifex Group will bear all costs associated with the replacement of information technology systems for the Zinifex Group.

Stamp duty liability

The Residual Group has agreed to pay certain stamp duty for which the Zinifex Group may be assessed to be liable in respect of the restructuring of Pasminco Limited and the separation of the Zinifex Group from the Residual Group.

Tax returns

The Residual Group will prepare, at its cost, any income tax return of any company in the Zinifex Group in relation to a tax period ending on or before 30 June 2003, if that return is due after the Effective Date. The Zinifex Group will prepare any income tax return that is required to be prepared for a member of the Zinifex Group for a tax period ending on or after 30 June 2004.

Where a Residual Group company has a tax liability for an income year ending on or before 30 June 2003, the Zinifex Group has agreed to amend, vary, substitute or re-lodge its tax returns for years ending on or before 30 June 2003 (provided that action is approved by the Commissioner of Taxation, if necessary) in order to provide that Residual Group company with the amount of tax losses (up to a specified maximum) specified in a loss notice issued by the Residual Group company.

Broken Hill production payments

The parties have agreed that, as from the Effective Date, 65% of the 'production linked payments' payable by Perilya Broken Hill Limited under the Sale and Purchase Deed relating to the Broken Hill mine are to be paid directly to the Zinifex Group.

Cockle Creek

The Residual Group has agreed to allow the Zinifex Group to access and use certain areas of the Cockle Creek site until 31 December 2004. A fee will be payable for the duration of the Zinifex Group's occupation of the site.

The Zinifex Group has agreed to bear the costs of removing specified residues from the Cockle Creek site. The Zinifex Group has an option to purchase certain plant and equipment at the Cockle Creek site.

Workers' compensation

The Zinifex Group retains liability for payment of certain claims relating to workers' compensation entitlements associated with its former operations at Broken Hill and Elura mines. We estimate that our exposure for these claims is approximately A$10.8 million.

The parties intend to enter into a separate deed governing their agreed arrangements for the management of workers' compensation matters relating to the Zinifex Group's former operations at Broken Hill and Elura by the Residual Group on behalf of the Zinifex Group.

The Residual Group has agreed to indemnify the Zinifex Group in connection with certain contractual obligations of Pasminco Australia Limited in respect of past workers' compensation liabilities relating to certain employees of the Broken Hill mine.

Workers' compensation bond

The Zinifex Group has agreed to pay to the Residual Group funds released from the A$16.5 million bond the Zinifex Group currently has with the New South Wales state government.

Advertising for claims

The Administrators are required to take all reasonable steps, in addition to complying with their obligations under the Corporations Regulations, to notify all persons who may claim to be a creditor of a Residual Group company and whose debt or claim has not been admitted of the date by which creditors must formally prove their debts or claims against the company. This is to be done by a process of advertising in local areas near certain sites currently or formerly operated by the Pasminco Group.

Costs of the Offering

The Residual Group is solely liable for all costs and expenses incurred in respect of financial advisory, tax, accounting, legal, listing and certain other administrative costs in respect of the Offering.

United States Withholding Tax

Pasminco Limited has indemnified the Zinifex Group for certain withholding tax liabilities (if any) which may arise as a result of aspects of the restructure of the Zinifex Group. This liability is capped at US$4,200,000.

Selling Agreement

Zinifex, Holdings, Pasminco and PFL (the "Pasminco Parties"), and the Joint Lead Managers have executed a "Selling Agreement" in relation to the Offer.

Under the Selling Agreement:

- the Joint Lead Managers have agreed to conduct the bookbuild in the manner contemplated in this Institutional Offering Memorandum and the Retail Prospectus (the "Offer Documents") and otherwise on the terms of the Selling Agreement; and
- each Joint Lead Manager has agreed, severally and not jointly, that:
    - if there is "successful completion of the Bookbuild"; and
    - subject to the conditions and their rights to terminate described below,

it will "settlement underwrite" one-third of the Global Institutional Offering and one-third of the Broker Firm Offering.

These obligations to settlement underwrite require that each Joint Lead Manager must procure purchasers for, or purchase itself, one-third of the:

- total number of Shares issued under the Global Institutional Offering at the Offer Price as arranged through the Bookbuild; and
- one-third of the total number of Shares issued under the Broker Firm Offering at the Offer Price per Share under the Australian Retail Offering.

Successful completion of the Bookbuild will be deemed to have occurred if:

- binding and bona fide offers have been received under the Offering for all of the Shares;
- the Joint Lead Managers recommend to Holdings a price per share for the Shares and Holdings accepts that recommendation; and
- the Pricing Committee approves the aggregate price for the Shares.

At the conclusion of the Bookbuild, the Joint Lead Managers will determine the allocation of Shares pursuant to the Offering in consultation with Zinifex.

The obligations of the Joint Lead Mangers to settlement underwrite the Global Institutional Offering and the Broker Firm Offering are conditional on receipt by the Joint Lead Managers promptly before the settlement time of various opinions from the Pasminco Parties and their respective advisers.

Pasminco Holdings has agreed to pay the Joint Lead Managers a total base arranging/selling fee of 3.25% of the total amount raised under the Offering, excluding:

- any Shares issued or sold under an employee share scheme; and
- Shares sold to creditors that submit firm bids prior to the date of lodgment of the Australian Retail Prospectus with ASIC.

In certain circumstances, Pasminco Holdings may also pay the Joint Lead Managers incentive fees of up to 0.50% of the gross proceeds from the sale of the Shares.

Pasminco Holdings has also agreed to reimburse the Joint Lead Managers for certain of their expenses incurred in connection with this Offering.

The Pasminco Parties have:

- provided representations and warranties in favour of the Joint Lead Mangers, including in relation to the Offer Documents and the restructuring of the Pasminco group to form Zinifex and its subsidiaries; and
- indemnified the Joint Lead Managers and their respective officers, employees, advisers and related bodies corporate against loss incurred by them as a result of.
    - any statement in or omission from the Offer Documents or certain public information being materially misleading or deceptive, or the omission from the Offer Documents of a matter required to be disclosed by Chapter 6D of the Australian Corporations Act;
    - any untrue statement or alleged untrue statement of a material fact contained in the Offer Documents or any omission or alleged omission of a material fact in the Offer Documents necessary in order to make the particular statements, in light of the circumstances in which they were made, not misleading;

- the distribution of the Offer Documents and the making of the Offering;
- any announcement, advertising or publicity of the Offering issued with the knowledge and written consent of the Pasminco Parties; and
- any review, inquiry or investigation undertaken by ASIC, ASX, any state or territory regulatory office, or any other regulatory or government agency (based on any such untrue statements, omissions, announcements, advertising or publicity in relation to the Offering or the Offer Documents.

The indemnity is not an indemnity against any losses of an indemnified party that arise other than in connection with the performance by the indemnified party of an obligation or role of a Joint Lead Manager contemplated under the Selling Agreement or the mandate letter, including, without limitation, losses arising in their capacity as a creditor of any of the Pasminco parties or as an acquirer of Shares under the Offering or that result from:

- the fraud, recklessness, wilful misconduct or negligence of the indemnified party, or the breach of legal requirements or of the Selling Agreement by the indemnified party; or
- any untrue statements or omissions, or alleged untrue statements or omissions made in reliance on written information furnished to the Pasminco Parties by any Joint Lead Manager and verified by the Joint Lead Manager expressly for use in the Offer Documents or certain public information (or any amendment thereto that the Joint Lead Managers have verified).

Each Joint Lead Manager may (whether or not with the consent of the other Joint Lead Managers but only after consultation with them) terminate its obligations under the Selling Agreement without cost or liability by notice to the Pasminco Parties and the other Joint Lead Managers if any one or more of the following events occurs at any time before the "Capital Raising Direction" is given:

- there is failure to perform one or more of the material obligations under any of the Deeds of Company Arrangement or under one of the other restructuring documents which were required to have been performed prior to successful completion of the Bookbuild; or
- one or more the Deed of Company Arrangement in respect of Pasminco Limited, Pasminco Finance Limited (a residual group company) ("PFL") and Century or certain of the other Restructuring documents has been terminated prior to successful completion of the Bookbuild; or
- the Joint Lead Managers have not received the required "comfort letter" from Ernst and Young; or
- approval, subject only to customary quotation conditions, is not obtained from ASX prior to the opening date for the Global Institutional Offering for the listing of Zinifex and quotation of all of the Shares; or
- the Australian Retail Offer has not closed on or prior to the opening date for the Global Institutional Offering; or
- a statement contained in the Offer Documents is misleading or deceptive, or a matter is omitted from the Offer Documents (having regard to the provisions of sections 710, 711 and 716 of the Australian Corporations Act); or
- the Offer Documents do, or any aspect of the Offering does, not comply with the Australian Corporations Act, the ASX Listing Rules or any other applicable law or regulation; or
- there is an event which:
  - would give rise to a material liability of the Joint Lead Managers as a consequence of a contravention of any law applicable in relation to the Offering or Global Institutional Offering other than a liability under the Selling Agreement; or

- could be reasonably expected to have a material adverse effect on the business, financial condition, results of operations or prospects (financial or otherwise) of Zinifex or its subsidiaries taken as a whole or on the success of or settlement of the Offering or Global Institutional Offering; or

- there occurs a new circumstance that has arisen since the Offer Documents were lodged that would have been required to be included in the Offer Documents if it had arisen before the Offer Documents were lodged in relation to any of the Pasminco Parties or any of their subsidiaries within the meaning of section 719 of the Australian Corporations Act*; or

- following the time of successful completion of the Bookbuild, the Dow Jones Industrial Average, S&P/ ASX 200 Index, or the S&P/ASX 200 Resources Index falls by an amount that is 10% or more of the level as at the close of trading on the date of the Selling Agreement; or

- following the time of Successful Completion of the Bookbuild:

  - trading is suspended or limited generally on the Australian Stock Exchange, the London Stock Exchange or the New York Stock Exchange; or

  - minimum or maximum prices for trading are fixed, or maximum ranges for prices are required, by any of said exchanges, or by order of ASIC, the U.S. Securities and Exchange Commission, the National Association of Securities Dealers, Inc. or any other Governmental Agency; or

- following the time of successful completion of the bookbuild, a general moratorium on commercial banking activities in Australia, United States or the United Kingdom, is declared by the relevant central banking authority in any of those countries, or there is a material disruption in commercial banking or security settlement or clearance services in any of those countries*; or

- any of the following occur:

  - a director or executive officer of Zinifex or Holdings is charged with an indictable offence relating to any financial or corporate matter;

  - any regulatory body commences proceedings against Zinifex or Holdings or any of their directors or executive officers in his or her capacity as a director or executive officer of that company, or announces that it intends to take such action; or

  - any director or executive officer of Zinifex or Holdings is disqualified from managing a corporation under Part 2D.6*; or

- the office of a director or executive officer of Zinifex or Holdings is vacated by force of Section 206C of the Australian Corporations Act*; or

- the Deed of Company Arrangement in respect of Pasminco Limited, PFL or Century or any of the other Restructuring documents is voided, varied, terminated, or an existing variation to any of those deeds is cancelled, by the Court pursuant to Part 5.3A without the consent of the Joint Lead Managers, which is not to be unreasonably withheld or delayed; or

- the due diligence report is misleading or deceptive*; or

- approval is refused or not granted, other than subject to customary conditions, to:

  - Zinifex' admission to the official list of ASX; or

  - the official quotation of all of the Shares on ASX or all of the Shares in Zinifex other than those (if any) subject to an escrow restriction, on or before the settlement date for the Offering, or if granted, the approval is subsequently withdrawn, qualified or withheld; or

- any of the following notifications are made:
    - ASIC issues an order under section 739 of the Australian Corporations Act in relation to the Offer Documents;
    - an application is made by ASIC for an order under Part 9.5 of the Australian Corporations Act in relation to the Offer Documents or ASIC commences any investigation or hearing under Part 3 of the Australian Securities & Investments Commission Act 1989 (Cth) in relation to the Offer Documents;
    - any person gives a notice under section 733(3) of the Australian Corporations Act or any person (other than a Joint Lead Manager) who has previously consented to the inclusion of their name in the Offer Documents or to be named in the Offer Documents withdraws that consent; or
    - any person gives a notice under section 730 of the Australian Corporations Act in relation to the Offer Documents; or
- any forecast that appears in the Offer Documents becomes incapable of being met or, in the reasonable opinion of the Joint Lead Managers, is unlikely to be met in the projected time*; or
- the $US per tonne cash settlement price of zinc or lead, as published by the London Metal Exchange on its company website, or the $A equivalent of that price (calculated by reference to $A/$US rate published by IRESS Market Technology on its market data system under the code AUDUSD.FX) falls by more than 10% following the time of successful completion of the bookbuild; or
- the $A/$US rate published by IRESS Market Technology on its market data system under the code AUDUSD.FX appreciates by more than 10 % following the time of successful completion of the Bookbuild; or
- a representation or warranty contained in the Selling Agreement on the part of the Pasminco Parties is not true or correct*; or
- one of the other Joint Lead Managers Terminates under the Selling Agreement (although the right of a Joint Lead Manager to terminate under this paragraph is not available in relation to circumstances in respect of which that Joint Lead Manager provides a notice to the Administrators electing to take up the rights and obligations of a terminating Joint Lead Manager); or
- following the time of successful completion of the Bookbuild, hostilities not presently existing commence (whether war has been declared or not) or a major escalation in existing hostilities occurs (whether war has been declared or not) involving any one or more of Australia, the United Kingdom, any member state of the European Union, North or South Korea, China or the United States of America, a state of national emergency is declared by any of these countries, a major terrorist act is perpetrated in any of these countries*; or
- following the time of successful completion of the Bookbuild, there is introduced, or there is a public announcement of a proposal to introduce, into the Parliament of Australia, any State of Australia, the Congress of the United States or any U.S. state legislature, a new law, or the Reserve Bank of Australia, any Federal or State authority of Australia, the United States or the Netherlands, adopts or announces a proposal to adopt a new policy (other than a law or policy which has been announced before the date of this agreement), any of which does or is likely to prohibit the Offering*; or
- a contravention by any of the Pasminco Parties or any of their subsidiaries, of the Australian Corporations Act, its constitution, or any of the ASX Listing Rules*; or

- any of the Pasminco Parties fails to perform or observe any of its obligations under the Selling Agreement*; and

- one of more of the material steps under the Conditional Deed, the Deeds of Company Arrangement and the PPT Lease Consent and Waiver Deed to be taken to effect the Restructure of the Group between successful completion of the Bookbuild and settlement of the Offering is not completed prior to settlement of the Offering, without the consent of the Joint Lead Managers, which is not to be unreasonably withheld.

The termination events described in the paragraphs marked with an asterisk above only apply if the event:

- has or is likely to have a materially adverse effect on the financial conditions, position or prospects of Zinifex or its subsidiaries (insofar as the position of the subsidiary affects the overall position of the Ongoing Group), on the likely market price of the Offer Shares or settlement of the Offer, or on the ability of any of the Pasminco Parties to meet its material obligations under this agreement; or

- could reasonably be expected to give rise to a material liability of the Joint Lead Manager under any law or regulation.

Notwithstanding anything in the Selling Agreement, to the extent permitted by law, Zinifex and Holdings have no liability whatever under the Selling Agreement unless and until settlement of the Offering occurs. However, the other Pasminco Parties agree that they will assume, jointly and severally, any liability of Zinifex or Holdings that is so limited, and that they will have no rights of subrogation in law or equity against Zinifex or Holdings in relation to such liability.

If settlement occurs, the maximum liability for Holdings, Pasminco and PFL in respect of any losses is the gross proceeds received or receivable from the sale of the Shares. However, the liability of Zinifex for losses is not limited in any way.

Notwithstanding anything in the Selling Agreement, the Pasminco Parties have no obligation to issue or transfer the Shares or do any thing or not do any thing they would otherwise be required to do or not do under the Selling Agreement if, (a) they have not received an opinion from Minter Ellison, in the form annexed to the Selling Agreement, and (b) in their reasonable opinion and the opinion of their legal advisers, to issue or transfer the Shares or to do or not do the thing would involve a contravention of section 724 of the Australian Corporations Act or any other law.

Disclosure of Interests of Directors

Except as set out in this Institutional Offering Memorandum:

- no Director or proposed Director of our Company has, or has had in the 2 years before lodgement of this Institutional Offering Memorandum and the Retail Prospectus with ASIC, an interest in:

    - the formation or promotion of our company;

    - any property acquired or proposed to be acquired by us in connection with our formation or promotion or the Offering; or

    - the Offering;

- no amounts, whether in cash or shares or options or otherwise, have been paid or agreed to be paid, and no benefit has been given or agreed to be given, to any Director or proposed Director of our Company, either to induce him to become, or to qualify him as, a director, or otherwise for services rendered by him in connection with our promotion or formation, or in connection with the Offering.

Directors' Shareholdings

Our Directors are not required under our Constitution to hold any of our Shares. As at the date of this Institutional Offering Memorandum, no Director of our Company is the beneficial holder of any Shares, options or other securities in our Company.

However, our Directors may acquire Shares pursuant to the Offering (either directly or through associates).

All remuneration payable to Greig Gailey prior to 5 April 2004 is the responsibility of Pasminco Limited and not Zinifex.

As part of his contract of employment with Pasminco Limited, Mr Gailey is entitled to a long term incentive payment of up to A$500,000 for the current year of that contract. The pro rata maximum amount that is payable to Mr Gailey for the period to 5 April 2004, when that contract will terminate, will be A$338,000. The actual amount payable for this incentive has not yet been determined by the Administrators. The Administrators have agreed with Mr Gailey that when the amount is determined, he will take that amount in Zinifex shares. The maximum number of Zinifex shares that Zinifex will be required to issue to Mr Gailey will be A$338,000 divided by the Final Price. The number of Shares that Pasminco Holdings will have available for sale under this Offering will be reduced by that number. Pasminco Holdings will not be paid for those Shares by Zinifex.

Any Shares issued to Mr Gailey under his contract of employment with Pasminco Limited must be held by him for one year.

Non-Executive Directors' Fees

Our Constitution provides that our non-executive Directors are entitled to be paid Directors' fees in aggregate up to a total amount or value per year determined from time to time by our company in general meeting. Currently, that amount is A$1.5 million. This remuneration is to be divided among our non-executive Directors in such proportion as our Board determines. A non-executive Director may not be paid any special or additional remuneration which includes a commission on or percentage of profits, operating revenue or turnover.

Participation in Zinifex Limited Share Plans

Upon completion of this Offering, all Non-Executive Directors will be required to sacrifice at least 20% (or such other minimum percentage determined by the Board from time to time) of their annual directors' fees in exchange for Shares under the Non-Executive Director Share Plan. This requirement ceases once the equivalent of a qualifying shareholding is held. The Board's current intention is the Non-Executive Directors must sacrifice an amount equivalent to eighteen months worth of current fees under the Non-Executive Director Share Plan. For further description see "Non-Executive Director Share Plan" set out in the 'Directors and Management' section of this Institutional Offering Memorandum.

Deeds of Access, Insurance and Indemnity with our Directors

We have entered into standard deeds of access, insurance and indemnity with our Directors. Pursuant to the deeds, we have undertaken to:

- make available to each of our Directors our Company's documents whilst the Director is in office and for seven years (and longer in some circumstances) after the Director has ceased to be a Director;
- indemnify each Director of our Company against certain liabilities incurred by him or her as a Director or executive of our company, or the director or executive of any of our subsidiaries; and
- take out and maintain an insurance policy in respect of any liability incurred as a Director.

We have also entered into a separate deed of indemnity with executive director Greg Gailey. This deed indemnifies Mr. Gailey in his capacity as Managing Director and CEO, and also extends to his former capacity as an employee of Pasminco Limited or any of its subsidiaries.

Directors' Insurance

There is an insurance policy which covers our Directors and our proposed Directors against certain civil liabilities they may incur through their participation in the Offering, including liabilities arising from this Institutional Offering Memorandum and the Retail Prospectus, and against certain costs and expenses.

Other Interests of our Directors

Prior to their appointment to the Board, our non-executive Directors served as members of a Pasminco advisory board in anticipation of this Offering and the formation of Zinifex Limited. In this role, our non-executive Directors received monthly fees pursuant to a consultancy agreement. The total remuneration paid to them from 1 December 2002 to 29 February 2004 was as follows:

Name	Total Remuneration (in A$)
Peter Mansell	221,667
Peter Cassidy	140,000
Richard Knight[1]	130,000
Anthony Larkin	140,000
Dean Pritchard	140,000

(1) Mr. Knight's consultancy agreement began on 1 January 2003.

For information on the remuneration of our directors, see "Directors and Senior Management – Remuneration of Directors and Senior Executives".

Administrators' Fees and other Interests

The Administrators (John Menzies Spark and Peter Damien McCluskey, partners of the firm Ferrier Hodgson (Victoria)) have performed professional advisory services in connection with this Offering in their capacity as administrators appointed to administer the affairs of Pasminco Limited pursuant to Section 436A of the Corporations Act and, following the execution by Pasminco Limited and most of its wholly owned Australian subsidiaries, of deeds of company arrangement, as the administrators of the deeds of company arrangement. In aggregate, the Administrators will receive approximately A$1,000,000 for these services to the date of the Prospectus and the Institutional Offering Memorandum.

The Administrators are entitled to certain indemnities and limitations of liability pursuant to the Pasminco Limited deeds of company arrangement - refer to "Voluntary Administration and Restructuring" for further information in relation to these matters.

As at the date of this Institutional Offering Memorandum, the Administrators have no beneficial ownership of any Shares, options or other securities in our Company.

Disclosure of Interests of Experts and Advisors

Except as set out below or elsewhere in this Institutional Offering Memorandum, no persons named in this Institutional Offering Memorandum or the Retail Prospectus as performing a function in a professional, advisery or other capacity in connection with the preparation or distribution of this Institutional Offering Memorandum or the Retail Prospectus, or any person who is a promoter of our Company or a stockbroker to the Offering, holds, or has at any time during the last two years held, any interest in:

- our formation or promotion;
- the Offering; or
- any property acquired or proposed to be acquired by us in connection with our formation or promotion or the Offering.

Except as set out below or elsewhere in this Institutional Offering Memorandum, no person has paid or agreed to pay any amount, or given or agreed to give any benefit, to:

- any person named in this Institutional Offering Memorandum or the Retail Prospectus as performing a function in a professional, advisery or other capacity in connection with the preparation or distribution of this Institutional Offering Memorandum or the Retail Prospectus;
- any person who is a promoter of our company; or
- any stockbroker to the Offering,

for services provided by the person in connection with our formation or promotion or the Offering.

Minter Ellison has acted as Australian Lawyers in connection with the Offering. Minter Ellison has performed work for the purposes of due diligence enquiries, and in relation to the preparation of this Institutional Offering Memorandum and the Retail Prospectus, the restructuring of the Pasminco group of companies to facilitate the Offering and has also assisted with the Company's listing on the ASX. In aggregate, the Administrators have paid or agreed to pay Minter Ellison approximately A$2,400,000 for these services to the date of this Institutional Offering Memorandum and the Retail Prospectus.

Ernst & Young has acted as Independent Accountant in respect of the Offering, has prepared the Independent Accountant's Report and has performed work for the purposes of due diligence enquiries. In aggregate, the Administrators have paid or agreed to pay Ernst & Young approximately A$770,000 for these services to the date of this Institutional Offering Memorandum and the Retail Prospectus.

Citigroup Global Markets has acted as a Joint Lead Manager for the Offering in respect of which it will receive the fees described in "Plan of Distribution".

Deutsche Bank AG has acted as a Joint Lead Manager for the Offering in respect of which it will receive the fees described in "Plan of Distribution".

UBS has acted as a Joint Lead Manager for the Offering in respect of which it will receive the fees described in "Plan of Distribution".

Australian Mining Consultants has acted as Independent Technical Specialist in respect of the Offering, and has prepared the Independent Technical Review Report. In aggregate, the Administrators have paid or agreed to pay Australian Mining Consultants approximately A$1,484,000 for these services to the date of this Institutional Offering Memorandum and the Retail Prospectus.

URS Australia Pty Ltd has prepared environmental liability estimates for each of our sites, in accordance with and subject to the methodology, limitations and qualifications summarised in Annex D of this Institutional Offering Memorandum (which is expressly incorporated herein). In aggregate, the Administrators have paid or agreed to pay URS Australia Pty Ltd approximately A$438,000 for theses services to the date of this Institutional Offering Memorandum and the Retail Prospectus.

Brook Hunt has provided information in relation to the lead and zinc industry. In aggregate, the Administrators have paid or agreed to pay Brook Hunt approximately A$133,000 for this information to the date of this Institutional Offering Memorandum and the Retail Prospectus.

Computershare Investor Services Pty Limited has agreed to provide share registry services to the Company in respect of which it is being paid a fee per application processed in respect of the Offering and a transaction based fee for future services.

Further amounts may be paid to the persons named above in accordance with their normal charges or as agreed with us.

Consents and Disclaimers of Responsibility

Consents to be named

Except as noted below, the following parties have given and have not, before lodgement of this Institutional Offering Memorandum and the Retail Prospectus with ASIC, withdrawn their written consent to be named in this Institutional Offering Memorandum and the Retail Prospectus in the form and context in which they are named:

- Citigroup Global Markets as Joint Lead Manager for the Offering;
- Deutsche Bank AG as Joint Lead Manager for the Offering;
- UBS AG, Australia branch as Joint Lead Manager for the Offering;
- Minter Ellison as representing the Company and the Administrators as to certain matters of Australian law;
- Mallesons Stephen Jaques as representing the Joint Lead Managers as to certain matters of Australian law;
- Jones Day as representing the Joint Lead Managers as to certain matters of U.S. federal law and New York law (for the Institutional Offering Memorandum only);
- Sullivan and Cromwell as representing the Company and the Administrators as to certain matters of U.S. federal law and New York law (for the Institutional Offering Memorandum only);
- John Menzies Spark and Peter Damien McCluskey as administrators of the Deeds of Company Arrangement;
- Computershare Investor Services Pty Limited as the Company's share registry.

Consents to be Named and to the Inclusion of Information

The following parties have given and have not, before lodgement of this Institutional Offering Memorandum and the Retail Prospectus with ASIC, withdrawn their written consent to the inclusion of the following information in this Institutional Offering Memorandum and the Retail Prospectus in the form and context in which it is included and to all references to this Institutional Offering Memorandum and the Retail Prospectus to that information in the form and context in which they appear:

- Minter Ellison to be named as Australian lawyers in connection with the Offering and to the inclusion of the Australian Taxation Report at Section 6 of the Retail Prospectus and to all references in the Retail Prospectus to that report;
- Ernst & Young to be named as Independent Accountant in connection with the Offering, to the inclusion of the Independent Accountant's Report in this Institutional Offering Memorandum, and to all references in this Institutional Offering Memorandum and the Retail Prospectus to that report;
- URS Australia Pty Ltd to the inclusion of the letter relating to the environmental liability estimates for each of our sites in Annex D of this Institutional Offering Memorandum and to all references to that letter in this Institutional Offering Memorandum and the Retail Prospectus;
- Australian Mining Consultants to being named as Independent Technical Specialist in connection with the Offering, to the inclusion of the Independent Technical Review Report in Annex E—Independent Technical Review Report of this Institutional Offering Memorandum and to all references in this Institutional Offering Memorandum and Retail Prospectus to that report.

- Brook Hunt and Associates Ltd to the inclusion of zinc and lead industry data and commentary in the "Zinc and Lead Overview", "Summary", "Business" and other sections of this Institutional Offering Memorandum and in Sections 2 and 3 of the Retail Prospectus and to all references in this Institutional Offering Memorandum and the Retail Prospectus to such Brook Hunt data and commentary.

- The Administrators to the inclusion of conclusions in relation to Pasminco and this Offering in the "Voluntary Administration and Restructuring" and "Selling Shareholder" sections of this Institutional Offering Memorandum and in Section 3 of the Retail Prospectus.

Disclaimers of Responsibility

Each person named above in "—Consents and Disclaimers of Responsibility":

- does not make, or purport to make, any statement in this Institutional Offering Memorandum or the Retail Prospectus or any statement on which a statement in this Institutional Offering Memorandum or the Retail Prospectus is based other than, in the case of a person referred to under the heading 'Consents to be Named and to the Inclusion of Information', a statement included in this Institutional Offering Memorandum or the Retail Prospectus with the consent of that party; and

- to the maximum extent permitted by law, expressly disclaims and takes no responsibility for any part of this Institutional Offering Memorandum or the Retail Prospectus, other than a reference to its name and, in the case of a person referred to under the heading 'Consents to be Named and to the Inclusion of Information', any statement or report which has been included in this Institutional Offering Memorandum or the Retail Prospectus with the consent of that party.

Expenses of the Offering

Total Expenses

The expenses of the Offering are payable by Pasminco Holdings Limited. The total expenses are currently estimated at approximately A$56 million (exclusive of GST) and include financial advisory, tax, accounting, legal, listing and other administrative fees as well as printing, advertising and other expenses relating to this Institutional Offering Memorandum and the Retail Prospectus. The expenses also include the fees payable, if the Offering is successfully completed, to the Joint Lead Managers (assuming a total fee of 3.75% and a total amount raised under the Offering of $1,239,600,000).

Regulatory

ASIC Confirmations and Relief

We have obtained confirmations from ASIC satisfactory to us that the on-sale restrictions in sections 707(3) and 707(5) of the Australian Corporations Act (Cth) will not apply to any on-sale of Shares sold or transferred under this Offering.

ASX Confirmation and Waivers

We have obtained a waiver of Listing Rule 11.4 from the ASX to allow Pasminco Limited to transfer its major assets to Zinifex Limited without offering shares in Zinifex Limited pro rata to Pasminco Limited shareholders or seeking Pasminco Limited shareholder approval of the transfer.

Consent to Lodgement

Each director of Pasminco Holdings Limited and each Director of the Company has consented to the lodgement of this Institutional Offering Memorandum with ASIC as provided by sections 712(4) and 720 of the Australian Corporations Act (Cth).

INDEX TO FINANCIAL INFORMATION

ERNST & YOUNG

120 Collins Street
Melbourne VIC 3000
Australia

GPO Box 67
Melbourne VIC 3001

Tel 61 3 9288 8000
Fax 61 3 9654 6166
DX 293 Melbourne

1 March 2004

The Directors
Zinifex Limited
Level 15
380 St Kilda Road
MELBOURNE VIC 3000

The Directors
Pasminco Holdings Limited
Level 15
380 St Kilda Road
MELBOURNE VIC 3000

To the Board of Directors

Independent Accountant's Report

1. Introduction

We have prepared this Independent Accountant's Report ("Report") at the request of the Directors of Zinifex Limited ("Zinifex") and the entities proposed to be its controlled entities (including the Ongoing Group described below), hereafter referred to collectively as the "Zinifex Group", and the Directors of Pasminco Holdings Limited ("Pasminco Holdings") for inclusion in an Institutional Offering Memorandum ("IOM") to be dated on or about 1 March 2004, relating to the offer (the "Offering") by Pasminco Holdings of 500 million ordinary shares of Zinifex (less the shares issued to employees pursuant to the Employee Gift Offering and the shares issued to the Managing Director referred to below).

Expressions defined in the IOM have the same meaning in this Report.

2. Background Information

Pasminco Resources Limited was incorporated on 9 August 2002 and changed its name to Zinifex Limited on 27 January 2004. Zinifex is a wholly owned subsidiary of Pasminco Limited (Subject to Deed of Company Arrangement) ("Pasminco") at the date of issue of the IOM. Pasminco Holdings is also a wholly owned subsidiary of Pasminco and is the vendor for the purposes of the Offering.

Zinifex was established to acquire the shares in the controlled entities owning the following operating assets, hereafter referred to as the "Ongoing Group" and more fully described in the Business Section of the IOM, from Pasminco:

- the Century and Rosebery mines;
- the Hobart, Port Pirie, Clarksville and Budel smelters; and
- certain debts owing by the above-named operations to Pasminco and its controlled entities.

Upon the completion of the Offering, Zinifex will have acquired 100% of the Ongoing Group from Pasminco. Details of the proposed transactions expected to take place on or prior to the Offering are set out in the Pro Forma Historical Financial Information Section of the IOM.

3. Scope

We have been requested to prepare a Report covering the following Pro-Forma Historical Financial Information:

- The pro-forma historical consolidated statements of financial performance reported to the earnings before interest and tax level ("Pro-Forma EBIT") of the Zinifex Group, which consists of Zinifex and the Ongoing Group, for the years ended 30 June 2001, 2002 and 2003 and the six months ended 31 December 2002 and 2003, including adjustments;

- The pro-forma consolidated statement of financial position of the Zinifex Group as at 31 December 2003; and

- Notes to the pro-forma historical financial information.

The Pro-Forma Historical Financial Information has been prepared on the basis detailed in this Report and in accordance with the accounting policies set out in Note 1 to the Pro Forma Historical Financial Information Section of the IOM. These policies require the application of all of the measurement and recognition requirements, but not all of the disclosure requirements, of Accounting Standards and other mandatory financial reporting requirements in Australia.

The Ongoing Group operated under substantially different ownership and therefore debt, equity and taxation structures. Accordingly, the pro-forma tax and interest expense have not been included in the pro-forma historical financial information as it was not possible to calculate these items in a meaningful manner and the amounts were not considered relevant to a potential investor in the Zinifex Group. The pro-forma EBIT reflects historical EBIT of Pasminco adjusted for certain items to arrive at EBIT for the Zinifex Group. These adjustments are detailed in Note 2 of the Pro Forma Historical Financial Information.

The pro-forma consolidated statement of financial position as at 31 December 2003 assumes the completion of the following contemplated transactions as at that date:

- The acquisition by Zinifex of the shares in the Ongoing Group entities from Pasminco for a net consideration payable of A$9;

- The acquisition by Zinifex of the shares in certain special purpose entities associated with the PPT leasing structure for an amount of A$70 as provided in clause 4(b) of the PPT Consent and Waiver Deed dated 4 October 2002;

- The issue of fully paid ordinary shares by Zinifex to Pasminco Holdings with the proceeds of sale of those shares used to repay the outstanding balance of the current Summit Facility less A$10 million;

- The drawdown of A$10 million in funds under Zinifex's new working capital facility with the funds used to repay the remainder of Zinifex's obligations under the current Summit Facility;

- The issue of 500 million ordinary shares (less the shares issued to repay the Summit Facility referred to above and the shares issued to employees pursuant to the Employee Gift Offering and the shares issued to the Managing Director referred to below) by Zinifex to Pasminco Finance Limited, a wholly-owned subsidiary of Pasminco Limited, at a fair value in satisfaction of the purchase price for the acquisition of debts owing by the Ongoing Group to Pasminco Finance Limited; and

- The issue of ordinary shares by Zinifex to employees pursuant to the Employee Gift Offering and the shares issued to the Managing Director as described in the "Directors and Senior Management" section of the IOM.

ERNST & YOUNG

Audit Of Annual Historical Pro-Forma Financial Information

The annual pro-forma historical financial information and directors' responsibility
The annual pro-forma historical financial information comprises the pro-forma historical consolidated statements of financial performance reported to the earnings before interest and tax level, and accompanying notes of the Zinifex Group, which consists of Zinifex and the Ongoing Group, for the years ended 30 June 2001, 2002 and 2003.

The directors of the Zinifex Group are responsible for preparing pro-forma historical consolidated statements of financial performance that present fairly the performance of the Zinifex Group to the earnings before interest and tax level. This includes responsibility for the maintenance of adequate accounting records and internal controls that are designed to prevent and detect fraud and error, and for the accounting policies and accounting estimates inherent in the financial information. These policies, as described in Note 1, require the application of all of the measurement and recognition requirements, but not all of the disclosure requirements, of Accounting Standards and other mandatory financial reporting requirements in Australia.

Audit approach
We conducted an independent audit of the pro-forma historical consolidated statements of financial performance reported to the earnings before interest and tax level, and accompanying notes for the years ended 30 June 2001, 2002 and 2003 in order to express an audit opinion thereon. Our audit was conducted in accordance with Australian Auditing Standards in order to provide reasonable assurance as to whether the annual pro-forma historical financial information is free of material misstatement. The nature of an audit is influenced by factors such as the use of professional judgement, selective testing, the inherent limitations of internal control, and the availability of persuasive rather than conclusive evidence. Therefore, an audit cannot guarantee that all material misstatements have been detected.

We performed procedures to assess whether in all material respects the annual pro-forma historical financial information presents fairly the Zinifex Group's financial performance, as represented by the results of its operations to the earnings before interest and tax level, in accordance with the basis of preparation and the measurement and recognition requirements, but not all of the disclosure requirements, of Accounting Standards and other mandatory financial reporting requirements in Australia as described in Note 1 to the Pro Forma Historical Financial Information.

We formed our audit opinion on the basis of these procedures, which included:

- examining, on a test basis, information to provide evidence supporting the amounts and disclosures in the annual pro-forma historical financial information, and

- assessing the appropriateness of the disclosures used and the reasonableness of significant accounting estimates made by the directors.

While we considered the effectiveness of management's internal controls over financial reporting when determining the nature and extent of our procedures, our audit was not designed to provide assurance on internal controls.

We performed procedures to assess whether the substance of business transactions was accurately reflected in the annual pro-forma historical financial information. These and our other procedures did not include consideration or judgement of the appropriateness or reasonableness of the business plans or strategies adopted by the directors and management of the Zinifex Group.

Review Of Interim Pro-Forma Historical Financial Information

The interim pro-forma historical financial information and directors' responsibility

The interim pro-forma historical financial information comprises the pro-forma historical consolidated statements of financial performance reported to the earnings before interest and tax level, and accompanying notes of the Zinifex Group, which consists of Zinifex and the Ongoing Group, for the six-month periods ended 31 December 2002 and 2003.

The directors of Zinifex are responsible for preparing pro-forma historical consolidated statements of financial performance that present fairly the performance of the Zinifex Group to the earnings before interest and tax level. This includes responsibility for the maintenance of adequate accounting records and internal controls that are designed to prevent and detect fraud and error, and for the accounting policies and accounting estimates inherent in the financial information. These policies, as described in Note 1, require the application of all of the measurement and recognition requirements, but not all of the disclosure requirements, of Accounting Standards and other mandatory financial reporting requirements in Australia.

Review approach

We conducted an independent review of the pro-forma historical consolidated statements of financial performance reported to the earnings before interest and tax level, and accompanying notes for the six-month periods ended 31 December 2002 and 2003 in order to make a statement about them. Our review was conducted in accordance with Australian Auditing Standards applicable to review engagements, in order to state whether, on the basis of the procedures described, anything has come to our attention that would indicate that the interim pro-forma historical consolidated financial information of the Zinifex Group, which includes Zinifex and the Ongoing Group, as described in the Scope section and set out in the Pro Forma Historical Financial Information, does not present fairly the Zinifex Group's financial performance as represented by the results of its operations to the earnings before interest and tax level, in accordance with the basis of preparation and the accounting policies described in Note 1 to the Pro Forma Historical Financial Information.

A review is limited primarily to reading of relevant Board minutes, inquiries of Company personnel and analytical procedures applied to the financial data. These procedures do not provide all the evidence that would be required in an audit, thus the level of assurance is less than given in an audit. We have not performed an audit and, accordingly, we do not express an audit opinion.

Review Of Pro-Forma Statement of Financial Position

The statement of financial position and directors' responsibility

The statement of financial position comprises the pro-forma consolidated statement of financial position and accompanying notes of the Zinifex Group, which consists of Zinifex and the Ongoing Group, as at 31 December 2003.

The directors of the Zinifex Group are responsible for preparing a pro-forma consolidated statement of financial position that presents fairly the financial position of the Zinifex Group as if the pro-forma transactions set out in the Background Information section of this Report had occurred. This includes responsibility for the maintenance of adequate accounting records and internal controls that are designed to prevent and detect fraud and error, and for the accounting policies and accounting estimates inherent in the financial information. These policies, as described in Note 1, require the application of all of the measurement and recognition requirements, but not all of the disclosure requirements, of Accounting Standards and other mandatory financial reporting requirements in Australia.

Review approach
We conducted an independent review of the statement of financial position in order to make a statement about it. Our review was conducted in accordance with Australian Auditing Standards applicable to review engagements, in order to state whether, on the basis of the procedures described, anything has come to our attention that would indicate that the statement of financial position of the Zinifex Group, which includes Zinifex and the Ongoing Group, as described in the Scope section and set out in the Pro Forma Historical Financial Information to this Report, does not present fairly the Zinifex Group's financial position as if the pro-forma transactions set out in the Background Information section of this Report had occurred, in accordance with the basis of preparation and the accounting policies described in Note 1 to the Pro Forma Historical Financial Information.

A review is limited primarily to reading of relevant Board minutes, inquiries of Zinifex Group personnel and analytical procedures applied to the financial data. We have also determined whether the pro-forma transactions described in the Background Information section of this Report form a reasonable basis for the preparation of the statement of financial position. These procedures do not provide all the evidence that would be required in an audit, thus the level of assurance is less than given in an audit. We have not performed an audit and, accordingly, we do not express an audit opinion.

4. Opinion and Statements

Audit Opinion on Annual Pro-Forma Historical Consolidated Financial Information

In our opinion, the annual pro-forma historical consolidated financial information of the Zinifex Group, which includes Zinifex and the Ongoing Group as described in the Scope section and set out in the Pro Forma Historical Financial Information to this Report, presents fairly the Zinifex Group's financial performance as represented by the results of its operations to the earnings before interest and tax level for the years ended 30 June 2001, 2002 and 2003 in accordance with the basis of preparation and measurement and recognition requirements, but not all of the disclosure requirements, of Accounting Standards and other mandatory financial reporting requirements in Australia as described in Note 1 to the Pro Forma Historical Financial Information.

Review Statement On Interim Pro-Forma Historical Consolidated Financial Information

Based on our review, which is not an audit, nothing has come to our attention that would indicate that the interim pro-forma historical consolidated financial information of the Zinifex Group, which includes Zinifex and the Ongoing Group as described in the Scope section and set out in the Pro Forma Historical Financial Information, does not present fairly the Zinifex Group's financial performance as represented by the results of its operations to the earnings before interest and tax level for the six-month periods ended 31 December 2002 and 2003 in accordance with the basis of preparation and the measurement and recognition requirements, but not all of the disclosure requirements, of Accounting Standards and other mandatory financial reporting requirements in Australia as described in Note 1 to the Pro Forma Historical Financial Information.

Review Statement On Statement of Financial Position

Based on our review, which is not an audit, nothing has come to our attention that would indicate that the statement of financial position of the Zinifex Group, which includes Zinifex and the Ongoing Group as described in the Scope section and set out in the Pro Forma Historical Financial Information, does not present fairly the Zinifex Group's financial position at 31 December 2003 as if the pro-forma transactions set out in the Background Information section of this Report had occurred, in accordance with the basis of preparation and the measurement and recognition requirements, but not all of the disclosure requirements, of Accounting Standards and other mandatory financial reporting requirements in Australia as described in Note 1 to the Pro Forma Historical Financial Information.

5. Additional Information Relevant to our Opinion and Statements

Without qualification to the opinions expressed above, attention is drawn to the following matters.

In compiling the pro-forma historical financial information, management have used the information contained within the annual financial reports, interim financial reports, reporting packages and underlying books and records of Pasminco and its controlled entities (the "Pasminco Group") for the years ended 30 June 2001, 2002 and 2003 and the six months ended 31 December 2002 and 2003. Ernst & Young audited the Pasminco Group's annual financial reports for the years ending 30 June 2001, 2002 and 2003 and reviewed Pasminco Group's interim financial reports for the six months ended 31 December 2002 and 2003. Qualified audit opinions were issued for the years ended 30 June 2001, 2002 and 2003, and qualified review opinions were issued for the six months ended 31 December 2002 and 2003.

The annual financial reports of Pasminco for the years ended 30 June 2001, 2002 and 2003, and the financial reports for the six months ended 31 December 2002 and 2003, were not prepared on a going concern basis. Accordingly, the assets of the Pasminco Group were recorded at the lower of cost and their estimated net realisable value, determined as the amount realisable from sale of the business as a going concern. As the restructure of the Pasminco Group had not been finalised at the time of the completion of the annual and interim financial reports, there were significant uncertainties surrounding the appropriate bases for the measurement and classification of assets and liabilities and the ability of Pasminco and the Pasminco Group to continue as going concerns.

Due to the significance of the uncertainties, we were unable to, and did not express an opinion as to whether the financial report of Pasminco was in accordance with:

(a) the Corporations Act 2001 including:

(i) giving a true and fair view of the company's and consolidated entity's financial position as at 30 June 2001 and 2002 and of their performance for the years ended on those dates; and

(ii) complying with Accounting Standards and the *Corporations Regulations 2001*; and

(b) other mandatory professional reporting requirements in Australia.

Our review opinion in respect of the Pasminco Group's financial position as at 31 December 2002, and of its performance for the six months ended on that date was qualified on the same basis as the audit opinion for the years ended 30 June 2001 and 2002.

As the restructuring of the Pasminco Group continued to progress, further information was obtained in relation to the uncertainties. Whilst the uncertainties remained significant, a different qualified audit opinion was issued for the financial year ended 30 June 2003. Our qualified audit opinion stated that except for the effects on the financial report of such adjustments as might have been required had the very significant uncertainties referred to not existed, in our opinion the financial report of Pasminco was in accordance with:

(a) the Corporations Act 2001 including:

(i) giving a true and fair view of the company's and consolidated entity's financial position at 30 June 2003 and of their performance for the year ended on that date; and

(ii) complying with Accounting Standards and the *Corporations Regulations 2001*; and

(b) other mandatory professional reporting requirements in Australia.

Our review opinion in respect of the Pasminco Group's financial position as at 31 December 2003, and of its performance for the six months ended on that date was qualified on the same basis as the audit opinion for the year ended 30 June 2003.

The acquisition of the Ongoing Group and the amounts due by the Ongoing Group by Zinifex and the establishment of this new entity with reduced debt, and available financing facilities to trade as a going concern, remove the significant uncertainties referred to in the previous financial reports of Pasminco and the Pasminco Group. On the basis that these significant uncertainties have been removed, the previous qualification of our audit and review opinions are not relevant to the pro-forma historical financial information of the Ongoing Group.

6. Subsequent Events

Apart from the matters dealt with in this Report and having regard to the scope of our Report, to the best of our knowledge and belief, there have been no material transactions or events outside the ordinary business of the Zinifex Group subsequent to 31 December 2003 that have come to our attention, which require comment on or adjustment to, the information referred to in our Report or that would cause such information to be misleading or deceptive.

7. Disclosure

Ernst & Young does not have any pecuniary interests that could reasonably be regarded as being capable of affecting its ability to give an unbiased opinion in this matter. Ernst & Young provides audit, accounting, and other advisory services to Pasminco Holdings and Zinifex, and will receive a professional fee for the preparation of this Report.

The Directors of Zinifex and Pasminco Limited have agreed to indemnify and hold harmless Ernst & Young and its employees from any claims arising out of any material misstatement or omission in any material or information supplied by the Directors.

Consent to the inclusion of the Independent Accountant's Report in this IOM in the form and context in which it appears, has been given. At the date of this Report, this consent has not been withdrawn.

Yours faithfully

Ernst & Young

Pro Forma Statement of Financial Performance

	Notes	Audited 12 month period ended 30 June 2001 $m	Audited 12 month period ended 30 June 2002 $m	Audited 12 month period ended 30 June 2003 $m	Reviewed 6 month period ended 31 Dec 2002 $m	Reviewed 6 month period ended 31 Dec 2003 $m
Revenue from ordinary activities						
Sale of goods		1,865.1	1,835.4	1,622.4	825.7	775.9
Proceeds from sale of non-current assets		4.4	0.5	0.1	1.5	1.6
Insurance recoveries		10.2	2.3	1.0	0.8	—
Other		2.7	1.0	0.6	2.1	1.7
Total revenue from ordinary activities—Zinifex Limited	2	**1,882.4**	**1,839.2**	**1,624.1**	**830.1**	**779.2**
Changes in inventories of finished goods and work in progress		(10.0)	22.6	(36.0)	(12.5)	(4.0)
Raw materials and consumables used		(591.8)	(734.8)	(604.7)	(283.5)	(268.7)
Freight expenses		(162.2)	(158.3)	(156.2)	(79.9)	(71.3)
Energy expenses		(190.5)	(189.6)	(216.9)	(104.1)	(107.0)
Employee benefits expenses		(230.8)	(228.3)	(237.9)	(128.5)	(113.7)
Contracting and consulting expenses		(113.2)	(160.9)	(149.6)	(67.8)	(49.0)
Restructuring expenses		(34.2)	7.0	4.0	—	—
Other expenses from ordinary activities		(79.3)	(98.9)	(47.6)	(22.8)	(34.5)
Earnings before Interest, Tax, Depreciation and Amortisation (EBITDA)—Zinifex Limited	2	**470.4**	**298.0**	**179.2**	**131.0**	**131.0**
Depreciation and amortisation expense	2	(270.2)	(233.0)	(223.0)	(110.8)	(119.2)
Earnings before Interest and Tax (EBIT)—Zinifex Limited	2	**200.2**	**65.0**	**(43.8)**	**20.2**	**11.8**

Pro Forma Statement of Financial Position

	Notes	Pasminco Limited Reviewed As reported at 31 December (a) 2003 $m	Adjustments Carve-out of Residual Group (b) (Note 3) $m	Adjustments Acquisition and fair value (Note 3) $m	Zinifex Limited Pro Forma Reviewed 31 December 2003 $m
CURRENT ASSETS					
Cash assets	4	48.9	(0.1)	—	48.8
Receivables	5	171.0	(3.8)	—	167.2
Inventories	6	274.4	(1.2)	—	273.2
Other	7	17.0	—	—	17.0
Total CURRENT ASSETS		**511.3**	**(5.1)**	**—**	**506.2**
NON-CURRENT ASSETS					
Receivables	5	15.2	(4.0)	—	11.2
Property, plant and equipment	9	1,163.6	—	398.2	1,561.8
Other	7	7.4	—	—	7.4
Total NON-CURRENT ASSETS		**1,186.2**	**(4.0)**	**398.2**	**1,580.4**
Total ASSETS		**1,697.5**	**(9.1)**	**398.2**	**2,086.6**
CURRENT LIABILITIES					
Payables	10	109.5	(1.0)	—	108.5
Interest bearing liabilities	11	2,693.5	(2,662.8)	—	30.7
Provisions	12	201.0	(143.7)	—	57.3
Other		17.5	(9.8)	—	7.7
Total CURRENT LIABILITIES		**3,021.5**	**(2,817.3)**	**—**	**204.2**
NON-CURRENT LIABILITIES					
Payables	10	0.4	—	—	0.4
Interest bearing liabilities	11	160.3	—	—	160.3
Deferred tax liabilities	13	20.4	2.3	222.3	245.0
Provisions	12	250.8	(13.7)	—	237.1
Total NON-CURRENT LIABILITIES		**431.9**	**(11.4)**	**222.3**	**642.8**
Total LIABILITIES		**3,453.4**	**(2,828.7)**	**222.3**	**847.0**
NET ASSETS		**(1,755.9)**	**2,819.6**	**175.9**	**1,239.6**
EQUITY					
Contributed equity	14				1,239.6
Total EQUITY					**1,239.6**

(a) In the Pasminco Limited financial statements, all Balance Sheet items are classified as current due to the intended sale and realisation of assets and compromise or payment of all liabilities in the existing Pasminco Limited group. Statements of Financial Position balances have been re-classified from current to non-current and between asset categories as appropriate for presentation purposes.

(b) The assets and liabilities of entities not acquired by Zinifex Limited are excluded in the preparation of the pro forma Statement of Financial Position

1. Summary of Significant Accounting Policies

(a) Basis of Presentation of Financial Information

The pro forma historical financial information of Zinifex Limited has been extracted from the annual and half year financial reports of Pasminco Limited and prepared to present the results and financial position of Zinifex Limited (refer to Note 8 for details of entities comprising Zinifex Limited).

The pro forma historical financial information has been prepared in accordance with the measurement and recognition, but not all the disclosure requirements of the Corporations Act 2001 including applicable Accounting Standards. Other mandatory professional reporting requirements (Urgent Issues Group Consensus Views) have also been complied with. It is prepared in accordance with the basis of accounting described below and the historical cost convention. Where necessary, adjustments have been made to ensure that there is consistent application of the accounting policies by each entity comprising Zinifex Limited throughout each of the reporting periods.

(b) Principles of Consolidation

The pro forma historical financial information incorporates the assets, liabilities and results of all entities that will comprise the Zinifex Limited consolidated entity. The effects of all transactions between entities comprising the consolidated entity are eliminated in full.

A complete list of Zinifex Limited's controlled entities is set out in note 8.

The consolidated entity's interest in joint ventures has been included in the pro forma historical financial information by taking up the consolidated entity's share in each of the individual assets and liabilities of the joint ventures.

(c) Financial Instruments

Hedging has been undertaken in limited circumstances in order to avoid or minimise possible adverse financial or cash flow effects of movements in commodity prices.

Gains and losses on derivatives used as hedges are accounted for on the same basis as the underlying physical exposures they are hedging. Accordingly, hedge gains and losses are included in net profit or loss for the financial year when the related physical exposures are recognised in the statement of financial performance. Gains and losses related to qualifying hedges on firm commitments or anticipated transactions are deferred and recognised in income as adjustments to the underlying hedged transactions when they occur.

If, subsequent to the inception of the hedge, it becomes probable that some or all of the hedged transaction will not occur as designated, hedge accounting is discontinued when that assessment is made. The hedge gains and losses relating to the hedged transaction that is no longer expected to occur as designated are immediately recognised in net profit or loss for the financial year.

(d) Foreign exchange

Amounts payable and receivable in foreign currencies have been translated into Australian currency at the rates of exchange ruling at the balance date. Gains and losses on unhedged balances are recognised in the results of the period. All other transactions in foreign currencies during the year have been recognised at the exchange rates ruling at the time of the transactions.

The accounts of self sustaining overseas controlled entities are reported in Australian currency by translating assets and liabilities at the rates of exchange ruling at the balance date and the revenue and expense items at the

average of rates ruling during the year. Translation differences arising are included in the foreign currency translation reserve.

(e) Inventories

Stocks of ores, metals, concentrates and work in progress are valued at the lower of cost and net realisable value. Cost includes expenditure incurred in acquiring and bringing the stock to its existing condition and location and includes an appropriate portion of fixed and variable overhead expenses, including depreciation and amortisation. Stores are valued at cost, with due allowance for obsolescence. In each case, cost is determined on an average cost basis.

(f) Taxation

Tax effect accounting procedures are followed whereby the income tax expense in net profit or loss for the financial year is matched with the accounting profit after allowing for permanent differences. Provisions for current and future income tax are calculated on earnings using the "liability" method. Certain items of expenditure, mainly depreciation and other provisions, may be deductible for income tax purposes in years different from those in which they are charged against earnings. The amount of the taxation difference due to such timing differences is classified as a deferred tax liability or future tax benefit. It is consolidated entity policy not to carry forward any part of future tax assets arising from tax losses, including those arising as capital losses, unless their recovery is virtually certain through the consolidated entity's ability to derive future assessable income or capital gains sufficient to enable the benefits to be realised, and for the consolidated entity to continue to comply with deductibility conditions imposed by law. Dividend withholding tax is provided on the consolidated entity's portion of earnings of certain foreign subsidiaries where it is intended to repatriate those earnings to Australia as dividends.

Income tax expense and deferred tax balances presented in this financial report do not take into account the impact of adjustments, if any, that may arise should the group elect to enter into a tax consolidation group. At this time the Zinifex Group does not intend to tax consolidate under the recently enacted tax consolidation provisions and therefore the losses may only be utilised to offset taxable income of the specific entity that has the losses.

(g) Investments

Shares in companies held as long-term investments, which do not trade on an active market, have been stated at cost except to the extent that the amount is not deemed recoverable. Joint ventures and associates are accounted for in the consolidated financial report as set out in note 1(b). Dividend income is recognised as it becomes receivable. Interest income is recognised as it accrues on a daily basis.

(h) Leases

Leases of plant and equipment under which the consolidated entity assumes substantially all the risks and benefits of ownership are classified as finance leases, whilst other leases are classified as operating leases. Finance leases are capitalised with a lease asset and liability equal to the present value of the minimum lease payments being recorded at the inception of the lease. Capitalised lease assets are amortised on a straight-line basis to their residual value over the term of the lease, or where it is likely that the consolidated entity will obtain ownership of the asset, for the life of the asset. Lease payments made under operating leases are charged against profits in equal instalments over the accounting periods covered by the lease term.

(i) Mine Property, Property, Plant and Equipment

Mine property, property, plant and equipment are carried at cost. All items of mine property, property, plant and equipment, with the exception of freehold land, and certain mine freeholds and leaseholds, are depreciated over

their estimated remaining useful lives. Depreciation rates are reviewed regularly and reassessed in light of commercial and technological developments. The expected useful lives are as follows:

Buildings	40 years
Plant and Equipment	5-20 years

Capital spares purchased for particular plant are capitalised and depreciated on the same basis as the plant to which they relate.

(j) Exploration and Evaluation Expenditure

Expenditure on exploration and evaluation of individual projects is written off against earnings as incurred, except that when a project reaches the stage where such expenditure is considered to be capable of being recouped through development or sale, all subsequent expenditures are capitalised and amortised against production from the area once mining commences.

(k) Research and Development Expenditure

Expenditure on research and development is written off against earnings as incurred, except that, when a project reaches the stage where such expenditure is considered capable of being recouped through development or sale, all subsequent expenditures are capitalised. Unamortised costs are reviewed at each balance date to determine the amount (if any) that is no longer recoverable and any amount so identified is written off.

(l) Mine Development

Mine development expenditure for the initial establishment of access to mineral reserves, together with capitalised exploration, evaluation and commissioning expenditure, and financing costs on borrowings for a project prior to the commencement date of commercial production, are capitalised to the extent that the expenditure results in significant future benefits. These amounts are amortised over the current estimated economic reserve of the mine on a unit of production output basis. This calculation includes consideration of appropriate estimates of the future costs to be incurred in developing the estimated economic reserve, which includes the proven and probable reserve, plus an estimate of the economic resource within the inferred category.

(m) Recoverable Amount of Non-Current Assets

The recoverable amount of an asset is the net amount expected to be recovered through the cash inflows and outflows arising from its continued use and subsequent disposal.

Where the carrying amount of a non-current asset is greater than its recoverable amount, the asset is written down to its recoverable amount. Where net cash inflows are derived from a group of assets working together, recoverable amount is determined on the basis of the relevant group of assets.

The decrement in the carrying amount is recognised as an expense in net profit or loss in the reporting period in which the recoverable amount write-down occurs.

The expected net cash flows included in determining recoverable amounts of non-current assets are discounted to their present values using a market-determined, risk-adjusted discount rate (currently a real discount rate of 8%).

The market value of the consolidated entity's operations is subject to cyclical variation because of changes in internationally determined metal prices and exchange rates. It is the consolidated entity's policy to assess the recoverable amount of non-current assets using the long-term metal price and exchange rate parameters. No assets are carried in excess of their recoverable amount. This basis of valuation is consistent with the existing use of the assets to the business as a going concern and does not purport to show the current market value of assets. Where this assessment indicates a loss in value of the assets of an operation, an appropriate write down is made.

(n) *Employee Benefits*

Provision is made for expected benefits accruing to past and present employees in relation to such items as annual leave, long service leave, sick leave, medical benefits and workers' compensation.

Liabilities arising in respect of wages and salaries, annual leave and any other employee benefits expected to be settled within twelve months of the reporting date are measured at their nominal amounts based on remuneration rates which are expected to be paid when the liability is settled. All other employee benefit liabilities are measured at the present value of the estimated future cash outflow to be made in respect of services provided by employees up to the reporting date. In determining the present value of the future cash outflows, the market yield as at the reporting date on national government bonds, which have terms to maturity approximating the terms of the related liability, are used.

These provisions are accrued on the basis of statutory or contractual obligations. A number of employee superannuation funds exist which provide benefits for employees and their dependents on retirement, disability, resignation, retrenchment or death (refer note 18). Contributions are expensed as incurred.

The value of any instruments granted under the employee share scheme entered into by Zinifex are not charged as an employee entitlement except in any circumstances involving a cash settlement in which these amounts will be recognised in the profit and loss statement.

(o) *Restoration Expenditure*

(i) Mining Operations

Provision is made for the anticipated costs of future restoration and rehabilitation of areas from which natural resources have been extracted. The provision includes costs associated with reclamation, plant closure, waste site closure, monitoring, demolition and decontamination. The provision is based upon current costs and has been determined on a discounted basis with reference to current legal requirements and current technology. The restoration provision is separated into current (estimated costs arising within 12 months) and non-current components. Any change in the provision estimate is dealt with on a prospective basis.

(ii) Smelting Operations

Provision is made for the anticipated costs of future restoration and rehabilitation of smelting sites to the extent that a legal obligation exists and that the anticipated expenditure is not capital in nature. The provision includes costs associated with reclamation, monitoring, water purification and coverage and permanent storage of historical residues. The provision is based upon current costs and has been determined on a discounted basis with reference to current legal requirements and current technology. Any change in the provision estimate is dealt with on a prospective basis. The restoration provision is separated into current (estimated costs arising within 12 months) and non-current components.

(p) *Major Maintenance and Repairs Expenditure*

The costs of major overhauls of operating plant are considered to constitute increases in the value of the assets. Accordingly, the accounting treatment adopted is to recognise overhaul expenditure as an asset to be amortised over the period in which benefits are expected to arise (typically 3-4 years).

(q) *Sales Revenue*

Sales revenue is stated on a gross basis, with freight and realisation expenses included in the cost of sales. Sales of metals, concentrates, ores and by-products are recognised when the product passes out of the physical control of the selling company to external customers pursuant to enforceable sales contracts. As the final value of concentrate sales can only be determined from weights, assays, prices and exchange rates applying after a

shipment has arrived at its destination, sales of concentrates are recorded at estimated values pursuant to contract terms, with adjustments being subsequently recognised in the period when final values are determined.

(r) *Borrowing Costs*

Borrowing costs are recognised as expenses in the period in which they are incurred, except where they are included in the costs of qualifying assets. To the extent that additional funds have been borrowed for the purpose of acquiring a qualifying asset, and are associated with the qualifying asset, the interest rate used is that applicable to those funds.

The interest rate for any funds utilised in excess of specified borrowings is the weighted average for all other borrowings.

Borrowing costs include:

- interest on short-term and long-term borrowings;
- amortisation of discounts or premiums relating to borrowings;
- amortisation of ancillary costs incurred in connection with the arrangement of borrowings; and
- finance lease charges.

(s) *Cash*

Cash includes cash on hand and deposits at call that are readily convertible to cash and are subject to an insignificant risk of changes in value, net of outstanding bank overdrafts.

(t) *Trade and Other Creditors*

These amounts represent liabilities for goods and services provided to the consolidated entity prior to the end of the financial year and which are unpaid. The amounts are unsecured and are usually paid within 30 days of recognition.

(u) *Trade Receivables*

Trade receivables represent assets for goods and services supplied by the consolidated entity prior to the end of the financial year which remain unpaid. They arise from transactions in the normal operating activities of the consolidated entity.

Trade receivables are carried at nominal amounts due, less any provision for doubtful debts. A provision for doubtful debts is recognised when collection of the full nominal amount is no longer probable.

(v) *Acquisition of Assets*

The purchase method of accounting is used for all acquisitions of assets regardless of whether equity instruments or other assets are acquired. Cost is measured as the fair value of the assets given up, shares issued or liabilities undertaken at the date of acquisition plus incidental costs directly attributable to the acquisition. Where equity instruments are issued in an acquisition, the value of the instruments is their fair value as at the acquisition date. Transaction costs arising on the issue of equity instruments are recognised directly in equity.

Where settlement of any part of cash consideration payable is deferred, the amounts payable in the future are discounted to their present value as at the date of the acquisition. The discount rate used is the incremental borrowing rate, being the rate at which a similar borrowing could be obtained from an independent financier under comparable terms and conditions.

A liability for restructuring costs is recognised at the date of acquisition of an entity or part thereof when there is a demonstrable commitment to a restructuring of the acquired entity and a reliable estimate of the amount of the liability can be made.

(w) *Deferred Consideration*

Where settlement of any part of cash consideration receivable is deferred, the amounts receivable in the future are discounted to their present value.

2. Reconciliation to Pasminco Limited Reported Results

The following adjustments have been made to the results of Pasminco Limited in arriving at the amounts included in the pro forma combined statement of financial performance for Zinifex Limited:

	Notes	12 month period ended 30 June 2001 $m	12 month period ended 30 June 2002 $m	12 month period ended 30 June 2003 $m	6 month period ended 31 Dec 2002 $m	6 month period ended 31 Dec 2003 $m
Total Revenue from ordinary activities – Pasminco Limited		**2,319.3**	**2,039.8**	**1,767.0**	**884.7**	**830.5**
Adjustments						
Divested activities	(b)	(33.2)	(17.9)	(17.8)	(10.3)	(16.6)
Residual group activities	(c)	(513.9)	(219.6)	(106.5)	(54.1)	(31.6)
Foreign exchange hedging	(d)	130.0	35.3	(12.7)	9.3	—
Interest income	(a)	(10.4)	(3.3)	(3.3)	(1.7)	(3.1)
Reclassifications	(j)	(9.4)	4.9	(2.6)	2.2	—
Total Revenue from ordinary activities – Zinifex Limited		**1,882.4**	**1,839.2**	**1,624.1**	**830.1**	**779.2**
Profit /(loss) from ordinary activities before Interest, Tax, Depreciation and Amortisation (EBITDA) – Pasminco Limited	(a)	**(1,789.8)**	**12.3**	**209.5**	**35.0**	**(67.6)**
Adjustments						
Divested activities	(b)	88.1	16.2	22.2	9.2	(21.9)
Residual group activities	(c)	179.2	7.4	(144.5)	55.9	(138.5)
Foreign exchange hedging	(d)	979.0	22.3	(12.7)	9.3	—
Asset write downs	(e)	893.0	111.1	105.3	—	292.9
Operating lease payments for PPTV assets	(f)	(8.5)	—	—	—	—
Rehabilitation provisions	(g)	—	44.0	(38.5)	—	60.1
IPO and administration costs	(h)	—	20.3	33.3	21.8	6.0
Other financing related expenses	(i)	129.4	23.2	—	—	—
Reclassifications	(j)	—	41.2	4.6	(0.2)	—
Profit from ordinary activities before Interest, Tax, Depreciation and Amortisation (EBITDA) – Zinifex Limited		**470.4**	**298.0**	**179.2**	**131.0**	**131.0**
Depreciation and amortisation – Pasminco Limited		**(356.0)**	**(243.4)**	**(227.0)**	**(107.7)**	**(119.6)**
Adjustments						
Divested activities	(b)	22.1	28.5	7.1	1.1	0.4
Residual group activities	(c)	59.6	23.1	1.5	0.9	—
PPTV assets	(f)	4.1	—	—	—	—
Reclassifications	(j)	—	(41.2)	(4.6)	(5.1)	—
Depreciation and Amortisation – Zinifex Limited		**(270.2)**	**(233.0)**	**(223.0)**	**(110.8)**	**(119.2)**
EBIT – Zinifex Limited		**200.2**	**65.0**	**(43.8)**	**20.2**	**11.8**

(a) Reconciliation of Profit/(loss) from ordinary activities before Interest, Tax, Depreciation and Amortisation (EBITDA) – Pasminco Limited.

The pro forma historical financial information has been provided only to the EBIT level.

The first stage of the reconciliation process involved the calculation of EBITDA for Pasminco Limited.

The profit/(loss) from ordinary activities after tax of Pasminco Limited per the statutory accounts is reconciled to the profit/(loss) from ordinary activities before interest, tax, depreciation and amortisation (EBITDA) as follows:

	12 month period ended 30 June 2001 $m	12 month period ended 30 June 2002 $m	12 month period ended 30 June 2003 $m	6 month period ended 31 Dec 2002 $m	6 month period ended 31 Dec 2003 $m
Profit/(loss) from ordinary activities after tax – Pasminco Limited	**(2,418.3)**	**(411.0)**	**(225.7)**	**(184.4)**	**(272.4)**
Interest expense	131.2	180.5	209.2	110.9	97.7
Interest income	(10.4)	(3.3)	(3.3)	(1.7)	(3.1)
Tax expense/(benefit)	151.7	2.8	2.3	2.5	(9.4)
Depreciation and amortisation expense	356.0	243.3	227.0	107.7	119.6
EBITDA – Pasminco Limited	**(1,789.8)**	**12.3**	**209.5**	**35.0**	**(67.6)**

Adjustments

After calculating EBITDA for Pasminco Limited, the following adjustments have been made in determining both EBITDA and EBIT for Zinifex Limited:

(b) Divested Activities

The revenues and results of entities or businesses that will not form part of the Zinifex Limited group because they have been disposed, will be disposed or that have been discontinued, have been excluded from the pro forma historical financial information. The amounts excluded are as follows:

	12 month period ended 30 June 2001 $m	12 month period ended 30 June 2002 $m	12 month period ended 30 June 2003 $m	6 month period ended 31 Dec 2002 $m	6 month period ended 31 Dec 2003$m
Operating Revenue Adjustments					
Elura Mine	(14.2)	(4.2)	(9.0)	(5.7)	(10.3)
Gordonsville Mine	(18.4)	(11.7)	(7.1)	(4.5)	(3.5)
Clinch Valley Mine	(0.6)	(0.6)	(0.5)	—	(0.2)
Exploration Activities	—	(1.4)	(1.2)	(0.1)	(2.6)
Total Operating Revenue Adjustment	**(33.2)**	**(17.9)**	**(17.8)**	**(10.3)**	**(16.6)**
EBITDA Adjustments					
Elura EBITDA	78.3	(1.4)	6.1	(3.1)	(11.5)
Gordonsville EBITDA	(6.9)	12.6	9.1	6.4	(3.4)
Clinch Valley EBITDA	1.3	4.1	8.1	5.9	(3.8)
Exploration Activities	15.4	0.9	(1.1)	—	(3.2)
Total EBITDA Adjustment	**88.1**	**16.2**	**22.2**	**9.2**	**(21.9)**
Depreciation & Amortisation Adjustments					
Elura Depreciation	11.2	19.3	6.5	0.7	0.4
Gordonsville Depreciation	8.7	7.6	0.4	0.3	—
Clinch Valley Depreciation	1.7	1.6	0.2	0.1	—
Exploration Activities	0.5	—	—	—	—
Total Depreciation & Amortisation Adjustment	**22.1**	**28.5**	**7.1**	**1.1**	**0.4**

Notes

- On the 12 September 2003 the Elura mine was sold to Consolidated Broken Hill Ltd. Operating revenue has been adjusted to exclude the revenue from third-party sales of concentrates (intercompany sales have already been eliminated from the consolidated operating revenue of Pasminco Limited) and the proceeds on sale of the assets. EBITDA has been adjusted to exclude the results prior to disposal and the loss on sale. Depreciation has also been removed from the calculation of EBIT.
- On the 4 September 2003 Gordonsville and Clinch Valley mines were sold to a U.S. subsidiary of Tennessee Valley Resources (effective from the date on which the Gordonsville mine operations are closed, being May 2003 and the current planned closure date of Clinch Valley, being March 2004). Operating revenue has been adjusted to exclude the revenue from third-party sales of concentrates (intercompany sales have already been eliminated from the consolidated operating revenue of Pasminco Limited) and the proceeds on sale of the assets. EBITDA has been adjusted to exclude the results prior to disposal and the profit on sale. Depreciation has also been removed from the calculation of EBIT.
- A decision was taken in July 2001 to cease the Group's involvement with Greenfields mineral exploration activities worldwide. The results associated with the exploration activities and their subsequent disposal has been excluded from the pro forma historical financial information.

(c) Residual group activities

The revenues and results of entities not being acquired by Zinifex Limited (referred to collectively as the "Residual Group"), including Pasminco Limited, have been excluded from the pro forma historical financial information. The amounts excluded are as follows:

	12 month period ended 30 June 2001 $m	12 month period ended 30 June 2002 $m	12 month period ended 30 June 2003 $m	6 month period ended 31 Dec 2002 $m	6 month period ended 31 Dec 2003 $m
Operating Revenue Adjustments					
Cockle Creek Smelter	(151.1)	(136.6)	(101.2)	(54.0)	(29.5)
Broken Hill Mine	(99.7)	(28.0)	(5.3)	—	(2.0)
Proceeds from sale of Broken Hill Mine assets	—	(56.7)	—	—	—
Sale of Ernest Henry Mine concentrates	(116.0)	—	—	—	—
Proceeds from sale of Ernest Henry Mine	(145.0)	—	—	—	—
Other	(2.1)	1.7	—	(0.1)	(0.1)
Total Operating Revenue Adjustment	**(513.9)**	**(219.6)**	**(106.5)**	**(54.1)**	**(31.6)**
EBITDA Adjustments					
Cockle Creek Smelter	61.5	22.6	147.8	64.9	(12.3)
Broken Hill Mine	119.9	13.6	(6.6)	(1.3)	0.5
Pasminco Finance Limited	27.2	(30.7)	(286.1)	(7.9)	(126.8)
Savage Resources Limited	(12.6)	1.3	—	—	—
Profit on sale of Ernest Henry Mine	(4.8)	—	—	—	—
Ernest Henry Mine	(11.9)	—	—	—	—
Other	(0.1)	0.6	0.4	0.2	0.1
Total EBITDA Adjustment	**179.2**	**7.4**	**(144.5)**	**55.9**	**(138.5)**
Depreciation & Amortisation Adjustments					
Cockle Creek Smelter Depreciation	12.9	10.0	1.5	0.9	—
Broken Hill Mine Depreciation	43.2	13.1	—	—	—
Savage Goodwill Amortisation	2.2	—	—	—	—
Pasminco Europe Depreciation	1.3	—	—	—	—
Total Depreciation & Amortisation Adjustment	**59.6**	**23.1**	**1.5**	**0.9**	**—**

Notes

- On the 12 September 2003, the Cockle Creek Smelter was closed. Operating revenue has been adjusted to exclude the revenue from third-party sales of metals (intercompany sales have already been eliminated from the consolidated operating revenue of Pasminco Limited). EBITDA has been adjusted to exclude the results prior to closure and depreciation has been removed from the calculation of EBIT.
- On 31 May 2002, the Broken Hill Mine was sold to Perilya. Operating revenue has been adjusted to exclude the revenue from third-party sales of concentrates (intercompany sales have already been eliminated from the consolidated operating revenue of Pasminco Limited) and the proceeds on sale of the assets. EBITDA has been adjusted to exclude the results prior to disposal and the profit on sale. Depreciation has also been removed from the calculation of EBIT.
- On 24 April 2001, the interest in the Ernest Henry Mine ("EHM") was sold to MIM Holdings Limited. The amounts excluded from the pro forma historical financial information are the operating revenue from the sale of EHM concentrates prior to disposal, the results of EHM accounted for using the equity method and the proceeds and net profit on sale of the equity investment.
- Other Operating Revenue and EBITDA adjustments represent amounts which have been excluded from the ongoing group as the relate to minor entities such as American Zinc Company (USA), Pasminco Canada Holdings Inc, Pasminco International Exploration Inc and Pasminco International Pty Ltd which all form part of the residual group.

(d) Foreign exchange hedging

Zinifex Limited has adopted a different hedging policy in respect of foreign exchange. Therefore, the foreign exchange gains and losses incurred by Pasminco Limited have been excluded from the pro forma historical financial information.

Total revenue from ordinary activities has been adjusted to exclude gains and losses on foreign exchange contracts to the extent that these amounts had previously been included in the measurement of sales revenue. The amounts adjusted were losses in 2001 and 2002 of $130m and $35.3m, gains in 2003 of $12.7m and losses in the half year ended 31 December 2002 of $9.3m.

EBITDA has been adjusted to exclude the net gains and losses on foreign exchange contracts. The amounts adjusted were losses in 2001 and 2002 of $979.0m and $22.3m, gains in 2003 of $12.7m and losses in the half year to December 2002 of $9.3m.

(e) Asset write-downs

Pasminco Limited incurred significant asset write-downs during the periods in order to restate the asset values to their recoverable amount. Upon acquisition by Zinifex Limited the assets will be recognised at their fair values. Therefore the asset write-downs recorded by Pasminco Limited have been excluded from the pro forma historical financial information, as they are not relevant to the assets as recognised and measured by Zinifex Limited.

	12 month period ended 30 June 2001 $m	12 month period ended 30 June 2002 $m	12 month period ended 30 June 2003 $m	6 month period ended 31 Dec 2002 $m	6 month period ended 31 Dec 2003 $m
Asset write-downs					
Century Mine	437.7	101.0	21.8	—	292.9
Port Pirie Smelter	—	10.1	83.5	—	—
Dugald	26.1	—	—	—	—
Clarksville	327.1	—	—	—	—
Corporate	63.7	—	—	—	—
Goodwill	38.4	—	—	—	—
Total EBITDA Adjustment	**893.0**	**111.1**	**105.3**	**—**	**292.9**

The total asset write-downs that were recorded by Pasminco Limited in 2001 amount to $1,184.9m. Of this amount, $127.8m relates to Broken Hill, $73.2m relates to Cockle Creek and $90.9m relates to Elura. These amounts are excluded under adjustment (b) and (c). The remaining $893.0m is therefore excluded from the EBITDA of Zinifex Limited above.

(f) PPTV

As at 1 July 2000 the accounting treatment for the port pipeline and transfer vessel assets at the Century mine (collectively referred to as the PPTV assets) was changed to recognise the assets as owned by Pasminco Limited rather than as an operating lease. The change in accounting treatment resulted in a net credit to expenses of $4.4m being recognised in the 2001 financial year that would have been recognised in the 2000 financial year had the assets been treated as owned in that year. Adjustments have been made to remove this net credit to expenses from the 2001 year in the pro forma historical financial information as they relate to the 2000 financial year.

(g) Rehabilitation provisions

Zinifex has adopted a policy of providing for restoration and rehabilitation costs relating to legal and constructive obligations, whereas Pasminco provided for legal obligations only. The consistent application of this policy across the reporting periods has resulted in adjustments to recognise some provisions in earlier reporting periods. In particular, provisions have been raised in respect of residues stored on site that are now expected to be removed from site in the future.

In addition, an adjustment has been made to provisions raised at Clarksville. Rehabilitation provisions of $44.0m (US$25.7m) were raised at Clarksville in June 2002 and then, on the basis of further information obtained during the 2003 year, $38.5m (US$25.7m) of the provision was subsequently written back. As the further information revealed that the initial provision was not required, an adjustment was made to exclude both the original provision and the subsequent reversal.

(h) IPO and administration costs

Pasminco Limited incurred significant costs during the periods relating to the external administration of the company and consulting costs associated with the float. These costs recorded by Pasminco Limited have been excluded from the pro forma historical financial information, as they do not relate to the ongoing group or are non-recurring in nature.

(i) Other financing related expenses

	12 month period ended 30 June 2001 $m	12 month period ended 30 June 2002 $m	12 month period ended 30 June 2003 $m	6 month period ended 31 Dec 2002 $m	6 month period ended 31 Dec 2003 $m
Debtors securitisation – foreign exchange losses	12.6	0.1	—	—	—
Silver sale - foreign exchange losses	116.8	23.1	—	—	—
Total EBITDA Adjustment	**129.4**	**23.2**	—	—	—

Notes

- The sale of eligible trade debtors under the debtors securitisation programme ceased on 19 September 2001. The costs relating to debtors securitisation have been excluded from the pro forma historical financial information. The primary costs of this programme were included within interest expense in the Pasminco

Limited statutory accounts. The additional costs included in other financing related expenses relate to associated foreign exchange gains and losses.

- The forward silver sale and silver swap contracts were terminated in September 2001. The costs relating to the forward silver sale and silver swap contracts have been excluded from the pro forma historical financial information. This includes cost prior to and on termination of contracts and any associated foreign exchange gains and losses.

(j) Reclassifications

- Reclassifications of revenue have been performed to ensure consistent treatment of aluminium costs at the Hobart smelter, freight revenue and foreign exchange gains and losses on contracts, across all reporting periods.

- Reclassifications of EBITDA have been performed to ensure the consistent treatment of asset write-downs at Elura mine, Cockle Creek smelter and the US mines and smelters across all reporting periods. Asset write-downs at these sites have been reclassified as depreciation in all reporting periods.

- Reclassifications of EBITDA have been performed to ensure the consistent treatment of finance charges across all periods. As a result charges of $5.3m in the December 2002 half year have been reclassified from interest expense to operating costs.

3. Notes on the Compilation of the Pro Forma Balance Sheet

The pro forma consolidated balance sheet has been prepared in accordance with the accounting policies outlined in Note 1, the measurement and recognition requirements of applicable Australian Accounting Standards, other mandatory professional reporting requirements and on the assumption that the following transactions necessary to restructure Pasminco all occurred on 31 December 2003:

- The acquisition by Zinifex Limited of the shares in the operating entities of Pasminco Limited for a net consideration payable of A$9 (assuming the aggregate consideration paid under the Offering is A$1,239.6 million);

- The acquisition by Zinifex Limited of the shares in certain special purpose entities associated with the PPTV leasing structure for a net consideration payable of $70; and

- The issue of 500 million shares (less the shares granted to employees pursuant to the Employee Gift Offering and the shares granted to our Managing Director) to Pasminco Holdings Limited and Pasminco Finance Limited in accordance with the Deeds of Company Arrangement.

At the date of acquisition of the operating entities of Pasminco Limited, which is assumed to be 31 December 2003 for the purposes of the pro forma consolidated balance sheet, the company is required to record the acquired assets and liabilities at fair value. The fair value of the consideration paid, being the issue of 500 million shares (less the shares issued to employees pursuant to the Employee Gift Offering and the shares issued to the Managing Director), is assumed to be A$1,239.6 million for the purposes of this pro forma balance sheet. The difference between the value as recorded in the books of Pasminco Limited and the fair value of the net tangible assets of each entity has been accounted for as follows:

Consideration paid

Fair value of consideration paid (A$m)	1,239.6
	A$m
Net book value of Pasminco assets	(1,755.9)
Less the net book value of Residual Group assets	(2,819.6)
Net book value of Ongoing Group assets acquired by Zinifex	1,063.7
Fair value adjustments	
- increase in property, plant & equipment (i)	398.2
- increase in net deferred tax liability (ii)	(222.3)
	1,239.6

(i) The fair value of the operating assets acquired by Zinifex has been allocated based on the net present value of expected future pre-tax cash flows to be generated by these assets. The book value of these assets has been increased by A$398.2m to fair value.

(ii) A deferred tax liability, representing the difference between the fair values allocated to the assets and their tax values, has been calculated at fair value of A$447.8m. The fair value is also determined based on the net present value of expected future cash flows. The fair value of available tax losses has been estimated at A$202.8m and has been recognised as a reduction in the deferred tax liability. The book value of the tax liability acquired by Zinifex Limited is A$22.7m. The net increase in deferred tax liability required under acquisition accounting is A$222.3m.

The actual allocation of fair values will be finally determined after the completion of the offer based on the actual fair value of the assets and liabilities acquired at the actual date of acquisition.

	Notes	31 December 2003 $m
4. Cash Assets		
Cash at bank and on hand		45.8
Short term deposits		3.0
		48.8
Cash assets as at 1 April 2004 are expected to be $66.0 million.		
5. Receivables		
Current		
Trade debtors		133.7
Other debtors		33.5
		167.2
Non - Current		
Broken Hill sale receivable (a)		11.2
		11.2

(a) The sale of Broken Hill mine assets to Perilya Limited was completed on 31 May 2002. The sale price was made up of an initial cash payment and deferred components that are dependent on the volume of production and the zinc price and are payable over the four years commencing January 2003. The Zinifex Group will retain an entitlement to a share of the deferred production volume components of the deferred payments. The receivable has been recorded on a discounted basis. The Zinifex Group has no entitlement to the deferred zinc price component.

6. Inventories	
Raw materials and stores – at cost	136.1
Work in progress – at cost	64.5
Finished goods – at cost	72.6
Total inventories – at cost	273.2
7. Other Assets	
Current	
Prepayments	11.3
Other	5.7
	17.0
Non-current	
Investments	1.8
Deferred expenditure – at cost	5.6
	7.4

8. Investments in Controlled Entities

Unquoted investments of the parent entity in controlled entities which are wholly owned, except Pasminco Sogem LLC and Pasminco Taylor Chemicals, Inc. (which are 80% owned) and Lawn Hill and Riversleigh Pastoral Company Pty Ltd (which are 50% owned), comprise the following:

ADBT Pty Limited	Australia	Ordinary
Budel Management BV	Netherlands	Ordinary
Budel Zink BV	Netherlands	Ordinary
Budelco BV	Netherlands	Ordinary
Buzifac BV	Netherlands	Ordinary
Buzipon BV	Netherlands	Ordinary
Buzisur BV	Netherlands	Ordinary
Investment Co Pty Limited	Australia	Ordinary
Lawn Hill and Riversleigh Pastoral Holding Company Pty Ltd	Australia	Ordinary and Special
Pasminco Australia Limited	Australia	Ordinary
Pasminco Canada Holdings Inc	USA	Ordinary
Pasminco Century Mine Limited	Australia	Ordinary
Pasminco Exploration & Mining BV	Netherlands	Ordinary
Pasminco Exploration Private Limited	India	Ordinary
Pasminco Group Treasury Pty Limited	Australia	Ordinary
Pasminco Hong Kong Limited	Hong Kong	Ordinary
Pasminco Insurance Pte Limited	Singapore	Ordinary
Pasminco International Exploration Inc	USA	Ordinary
Pasminco International (Holdings) Pty Limited	Australia	Ordinary
Pasminco Metals Pty Limited	Australia	Ordinary
Pasminco Netherlands (Holdings) BV	Netherlands	Ordinary
Pasminco Port Pirie Smelter Pty Limited	Australia	Ordinary
Pasminco Resources (US), Inc.	USA	Ordinary
Pasminco Sogem LLC	USA	Ordinary
Pasminco Superannuation Pty Limited	Australia	Ordinary
Pasminco Taylor Chemicals, Inc.	USA	Ordinary
Pasminco UK (Holdings) Limited	UK	Ordinary
Pasminco UK Limited	UK	Ordinary
Pasminco Zinc, Inc.	USA	Ordinary
PCML SPC Pty Limited	Australia	Ordinary
PPTV Pty Limited	Australia	Ordinary
PRUS Holdings Pty Ltd	Australia	Ordinary
Savage Marketing Company Inc.	USA	Ordinary
Savage South East Asian Ventures Inc	USA	Ordinary
SPC (Nominees) Pty Limited	Australia	Ordinary
SPC1 Pty Limited	Australia	Ordinary
SPC2 Pty Limited	Australia	Ordinary
Turn Off Lagoons Pastoral Holding Company Pty Ltd	Australia	Special

	Notes	31 December 2003 $m
9. Non-current Assets – Property Plant & Equipment		
Freehold and leasehold land and buildings – at cost		52.2
Plant and equipment – at cost		1,265.1
Mine property and development – at cost		231.7
Construction in progress		12.8
		1,561.8
10. Payables		
Current		
Trade creditors		108.5
Other creditors		—
		108.5
Non-Current		
Other creditors		0.4
		0.4
11. Interest Bearing Liabilities		
Current		
External borrowings – Ongoing Facility Agreement (b)		10.0
External borrowings – PPTV (a)		20.7
		30.7
Non-current		
External borrowings – PPTV (a)		160.3

(a) The pipeline, port and transfer vessel (PPTV) assets relating to the Century mine were initially recognised as an operating lease. Effective 1 July 2000, the Urgent Issues Group Abstract 50 "Evaluating the Substance of Transactions involving the Legal Form of the Lease" was adopted, and as a consequence, the PPTV assets have been accounted for as owned assets and the external borrowings of the lessor accounted for as liabilities from this date.

The special purpose entities included in this financing structure will be acquired at nominal cost by Zinifex Limited at the time of the listing. The Security Trust Deed provides for the outstanding liabilities under the PPTV Lease to be secured at Priority 2 Debt level following the Capital Raising. The PPTV facility is repayable in six monthly instalments with a final residual payment of $72 million in January 2008. As at the date of listing the balance of the PPTV facility is expected to be $170.4 million, following a $10.6 million repayment of principal in January 2004.

(b) With the repayment of the Summit Facility, Zinifex has negotiated and agreed an Ongoing Facility Agreement with a number of banks to meet working capital requirements of the Ongoing Group following the Capital Raising. The Ongoing Facility will be a $150 million revolving loan note facility with a 364 day term with security at Priority 2 Debt level under the Security Trust Deed. This pro forma balance sheet includes a liability of $10 million expected to be drawn down against the ongoing facility at the date of the capital raising to meet certain commitments associated with the restructuring.

Details of banking covenants

(i)	Leverage Ratio: Ratio of Financial Liabilities to EBITDA:	1.5:1
(ii)	Interest Coverage Ratio: Ratio of EBIT and amortisation of mine development expense to interest expense	8.0:1
(iii)	Minimum Tangible Net Worth: Net Assets minus Intangibles	A$975 million at all times

	Notes	31 December 2003 $m
12. Provisions		
Current		
Employee benefits		50.1
Restoration – mining/smelting operations	(a)	5.6
Other		1.6
		57.3
Non-current		
Employee benefits		36.8
Restoration – mining/smelting operations	(a)	200.3
		237.1

(a) During 2003, the Company engaged an independent environmental consultant, URS Australia Pty Limited ("URS"), to work with our operations personnel to identify material environmental issues faced by the Company and to estimate the current and likely future costs associated with rectification and remediation of those issues. The process for estimating future costs relating to identified material environmental issues employed probabilistic techniques, the methodology of which is set out in more detail in the URS letter in Annex D to this Institutional Offering Memorandum. The process generated a range of likely cost estimates associated with the material issues that were identified, based on an assessment of the likelihood and timing of each occurring. The cost of each estimate (expressed in unescalated present day dollars) was discounted back to the present day at an 8% real discount rate and the total was then expressed as a single amount at a range of confidence levels. The guidelines used to determine whether an environmental issue was material or not, and the limitations and qualifications to the process for identifying material environmental issues and estimating future costs, are summarised in Annex D to this Institutional Offering Memorandum, which is expressly incorporated herein, and must be read in conjunction with the summary of material environmental issues in this Institutional Offering Memorandum.

The Company has made a provision in its Statement of Financial Position for each of the material issues identified by our environmental review, which it is required to under law and in a manner consistent with Australian GAAP. A reconciliation of these provisions to the estimated environmental costs at each site, expressed to an 80% confidence level, is shown below in this Note 12. While estimates expressed to an 80% confidence level reflect present day amounts, in probability, would be expected to be exceeded 20% of the time, this confidence level has been adopted by the Company as one that it considers is prudent for planning purposes. However, as our estimation process was based on probabilistic techniques there is a chance that the actual costs of rectifying material environmental issues will exceed those estimates, and potentially substantially. There is also a chance that not all the events underpinning our evaluation may necessarily occur and, of those that do, the actual costs and timing of them could differ from our estimates.

The Company has included certain environmental operating and capital costs in our fiscal year 2004 and 2005 forecasts. These are the costs that our environmental review determined (at an 80% confidence level) we are likely to incur during those periods relating to the material environmental issues identified, as quantified by our review and set out in this Institutional Offering Memorandum.

In determining an appropriate provision to recognise in the 31 December 2003 Statement of Financial Position, the Company has included each of the environmental issues identified as material in its environmental review which have an estimated NPV impact of greater than $1 million at an 80% confidence level (shown below) that are current or reasonably expected (within the next ten to fifteen years) licence obligations, but where the estimated expenditure is not capital in nature ("Licence Obligations"). Issues identified by this review that were not current licence obligations or that were capital in nature are listed in the column headed "Other Environmental Expenditure" The Company has made provision in the Statement of Financial Position equal to the estimated NPV of the expenditure required to address the "Licence Obligations" issues.

The Company has incorporated an estimate of the expenditure (expressed at an 80% confidence level) associated with each of the environmental issues identified as material by its environmental review that it believes will occur before 30 June 2005 into either its forecast capital expenditure or operating expenditure forecasts over that period. The Company estimates that approximately $27 million of the total NPV of the material issues that it identified below (shown under "Total (a)" below) is forecast to be incurred by the Company within the forecast period to 30 June 2005. In addition, the Company has included all the expenditure that it identified (as shown below in the "Total (a)" column) in assessing its fair value.

However, not all the events underpinning the Company's evaluation may necessarily occur and, of those that do, the actual costs and timing of them could differ from the estimates developed as part of the Company's review.

A summary of the material issues identified by the Company's environmental review is included in the "Environmental Management" sub-sections for each of the Zinifex sites (refer to the "Business" section in the Institutional Offering Memorandum). This Note should be read in conjunction with those sections.

The Company's calculation of the estimated environmental rectification and remediation costs was conducted on the basis of various assumptions. Those assumptions are set out in this Note 12, the URS letter in Annex D (which also includes URS' methodology for calculating the estimates) and, in respect of each material issue identified by the Company's environmental review, in the 'Environmental Management' sections for each of the Zinifex sites (refer to the "Business" section in the Institutional Offering Memorandum). This Note and the summary of material environmental issues contained in this Institutional Offering Memorandum must be read in conjunction with the limitations and qualifications summarised in Annex D to this Institutional Offering Memorandum (which is expressly incorporated herein). Any change to the assumptions used to evaluate these particular risks, such as confidence level, estimated cost, timing or likelihood of occurrence could however increase this estimated financial impact

The following table sets out the components of the environmental liabilities provided for in the pro forma balance sheet.

This Note 12 should also be read in conjunction with the Summary of Significant Accounting Policies (including notes (o) and (p)) accompanying this Statement of Financial Position.

		Cost Estimates		
	Provision Amount	Licence Obligations (d)	Other Environmental Expenditure	Total (a)
Century				
Closure provision		16.9	—	16.9
Waste rock dumps rehabilitation		8.1	—	8.1
Salting of Page Creek		3.2	—	3.2
Port facility water treatment		—	7.7	7.7
	28.2	28.2	7.7	(b) 33.4
Rosebery				
Hercules Mine closure		8.2	—	8.2
Hercules – Bakers Creek earthworks		9.4	—	9.4
Rosebery mine closure		16.0	—	16.0
	31.7	(b) 31.7	—	(b) 31.7
Port Pirie				
Arsenic speiss		5.9	—	5.9
Calcium arsenite storage		3.5	—	3.5
Groundwater rehabilitation		4.7	3.1	7.8
On-site contaminated Soil and Groundwater		—	1.5	1.5
Metal in Grain		—	2.2	2.2
Fugitive air emissions		—	16.1	16.1
SO_2 emissions		—	34.6	34.6
Surface water discharges		—	8.2	8.2
	14.1	14.1	65.7	(b) 70.5
Hobart				
MnO_2 stockpiles		6.6	—	6.6
Remnant jarosite		17.1	—	17.1
Timber		2.2	—	2.2
Surface water and groundwater		—	10.7	10.7
Dust management at wharf		—	5.9	5.9
SOx and NOx emissions		—	6.9	6.9
Acid bund		—	6.2	6.2
Soil		—	1.0	1.0
Soil stockpile		—	0.5	0.5
	25.9	25.9	31.2	(b) 54.1
Budel				
Aftercare Fund commitment		15.5	—	15.5
Aftercare risk		10.5	—	10.5
Gypsum pond closure		12.4	—	12.4
Greenhouse gas emissions		7.8	—	7.8
Wash tower sludge		1.8	—	1.8
IBC management		0.2	—	0.2
	(c) 97.0	(b) 44.8	—	(b) 44.8
Clarksville				
Capping impoundment 1		4.4	—	4.4
Gypsum		0.1	—	0.1
Capping closure of impoundments 2-5		0.3	—	0.3
	4.8	4.8	—	(b) 4.8
Corporate / Hobart				
Burnie Port		2.9	—	2.9
	2.9	2.9	—	2.9
Other	1.3	—	—	—
Total environmental provisions (e)	**205.9**	**152.4**	**104.6**	**(b) 242.2**

(a) The total cost estimates have been developed by URS in consultation with the Company (subject to the matters set out above). The allocation of the total between 'Licence Obligations' and 'Other Environmental Expenditure' has been developed by the Company.

(b) The net position of each site (as calculated at an 80% confidence level and shown under 'Total (a)') does not equal the arithmetic sum of the individual cost estimate components associated with that site. This is due to the statistical nature of the analysis employed by URS, and adopted by Zinifex, to reflect the probability of occurrence, timing and amount of the cost associated with the issue at an 80% confidence level.

(c) The provision for Budel represents the amount required by government authorities in the Netherlands. The value in the 'Total (a)' column represents the estimated expenditure that URS and the Company have assessed on certain assumptions is likely be required to meet the Company's obligations. The Company is currently in discussions with the authorities to be granted authority to reduce the provision.

(d) Provision is made for anticipated costs of future restoration and rehabilitation to the extent that a legal obligation currently or is reasonably expected (within the next 10 to 15 years) to exist and that the anticipated expenditure is not capital in nature.

(e) This Total represents the arithmetic total of the sub-totals for each site.

13. Non-Current Liabilities – Deferred Tax Liabilities

Deferred income tax liability arising from timing differences net of the offset of future income tax benefit, amounts to:	245.0

The net deferred income tax liability has been brought to account at fair value (refer Note 3).

Future income tax benefits, which have been offset against the provision for deferred income tax, arising from tax losses of controlled entities amount to:	202.8

This FITB has been brought to account at fair value determined as the net present value of the tax losses considered virtually certain based on forecast cash flows and managements' view of recoverability. The undiscounted value of tax losses considered virtually certain amount to $327.9 million ($1,093.0 million @ 30%).

The Directors estimate that the total potential future income tax benefit as at the date of this Institutional Offering Memorandum in respect of tax revenue losses (undiscounted) available to the group is of which $327.9m (undiscounted), $202.8m (discounted) has been recognised in the balance sheet:	540.0

The benefit of these tax revenue losses will only be obtained if:

(i) the consolidated entity derives future assessable income of a nature and of an amount sufficient to enable the benefit from the deductions for the losses to be realised;

(ii) the consolidated entity continues to comply with the conditions for deductibility imposed by tax legislation; and

(iii) no changes in tax legislation adversely affect the consolidated entity in realising the benefit from the deductions for the losses.

Under the Separation, Transitional and Shared Services Deed, Zinifex has agreed that if a residual group company has a tax liability in respect of a year ending prior to or on 30 June 2003, that it will, if requested by the residual group company, take action necessary to transfer tax losses for years ending prior to and including 30 June 2003. The amount of any tax loss transferred is limited to A$707 million and must not result in the total tax losses of the Ongoing Group (as at 30 June 2003) being less than A$1,103 million.

	31 December 2003 $m
14. Contributed Equity	
(a) Issued and paid up capital	1,239.6

Ordinary shares fully paid

Ordinary shares entitle the holder to participate in dividends and the proceeds on winding up of the Company in proportion to the number of shares held. On a show of hands every holder of ordinary shares present at a meeting in person or by proxy is entitled to one vote, and upon a poll each share is entitled to one vote.

(b) Employee share scheme As at 31 December 2003, there were no shares issued under the Zinifex Limited employee share plans. Zinifex Limited's employee share plans are described in "The Directors and Senior Management" section of this Offering Memorandum.

(c) Assumed issues of shares

Details	Number of shares	Issue Price $	$m
Shares issued in accordance with the terms of the Deed of Company Arrangement	500,000,000	2.48	1,239.6

15. Financial Instruments

Derivatives, including unrecognised financial instrument risk

Under the current policy the consolidated entity manages market price risk exposures according to policy approved by the Administrators. The Zinifex Limited Board will approve a materially similar policy prior to the offering. Commodity hedging is primarily undertaken to ensure Zinifex Limited is exposed to a floating commodity price. No speculative trading is undertaken. Instruments used by the consolidated entity to hedge exposures to exchange rates and commodity prices include currency options and metal futures. The accounting for these instruments is outlined in notes 1(c) and 1(d).

(a) Interest Rate Risk Management

The consolidated entity is exposed to interest rate volatility on deposits and borrowings.

The consolidated entity's exposure to interest rate risk and effective weighted average interest rate by maturity periods is set out in the following table.

31 December 2003
Interest rate risk exposures

	Notes	Weighted Average Interest Rate %	Floating interest rate $m	Non-interest bearing $m	Fixed interest rate $m	Total $m
Financial Assets						
Cash	4	3.10	45.8	—	—	45.8
Deposits	4	4.35	3.0	—	—	3.0
Trade debtors	5	—	—	133.7	—	133.7
Other debtors	5	—	—	33.5	—	33.5
Broken Hill Sale receivable	5	3.62	—	—	11.2	11.2
			48.8	167.2	11.2	227.2
Financial Liabilities						
Trade creditors	10	—	—	108.9	—	108.9
Short-term borrowings	11	6.23	30.7	—	—	30.7
Other interest-bearing liabilities	11	6.23	160.3	—	—	160.3
			191.0	108.9	—	299.9
Net financial assets/(liabilities)			(142.2)	58.3	11.2	(72.7)

(b) Foreign Exchange Risk Management

The consolidated entity does not enter into forward exchange contracts and currency options to hedge net revenues denominated in foreign currencies. At present no foreign currency contracts and foreign currency options are in place.

(c) Commodity Price Risk Management

The consolidated entity is exposed to commodity price volatility on commodity sales made by mines and smelters and raw materials purchased by the smelters. Under current policy, the consolidated entity may enter into zinc futures and swap contracts to hedge certain forward fixed price sales of zinc to customers in order to achieve the relevant zinc price at the date that the transaction is settled.

31 December 2003
Metal Futures Contracts

		Maturity date of transactions 6 months ending				
	Average Price US$ per tonne	30/06/04 Face Value of Contracts A$m	30/06/05 Face Value of Contracts A$m	31/12/06 Face Value of Contracts A$m	30/06/07 & beyond Face Value of Contracts A$m	Total A$m
Zinc						
Contracts purchased	863.6	34.3	45.0	12.2	—	91.5
Contracts sold	—	—	—	—	—	—
Net position		**34.3**	**45.0**	**12.2**	**—**	**91.5**

31 December 2003
Commodity Swaps
The company has no current commodity swap positions.

(d) Credit Risk

Credit risk represents the loss that would be recognised if the counterparties to financial instruments fail to perform as contracted.

The credit risk on financial assets of the consolidated entity, which have been recognised on the balance sheet, is generally the carrying amount, net of any provisions for doubtful debts.

Credit risk in trade receivables is also managed in the following ways:

- Payment terms can vary from 5-30 days after the date of end of month of delivery for domestic sales and for international sales this can vary from cash sales to the term stated in the letter of credit

- A regular risk assessment process is undertaken with credit limits imposed on customers;

- Export sales are predominantly covered by a letter of credit with approved financial institutions;

- Credit insurance is obtained for export sales debtors on open terms.

Credit risk arising from dealings in financial instruments is controlled by a strict policy of credit approvals, limits and monitoring procedures. The consolidated entity had no significant concentration of credit with any single counterparty over the period July 2003 to December 2003. Credit exposure of foreign currency and commodity derivatives is represented by the net fair value of the contracts, as disclosed.

The consolidated entity had no significant concentration of credit with any single counterparty over the period from July 2003 to December 2003, however from 1 January 2004 the consolidated entity has entered into sales agreements or arrangements with Trafigura and Lee Kee, which will increase credit exposure to these entities.

(e) Net Fair Value

The following methods and assumptions were used to estimate the net fair values.

Cash & Cash Equivalents, Debtors, Creditors, Dividends Payable and Short-term Borrowings
The carrying amounts of these financial instruments approximate their net fair value because of their short maturity.

Long-term Borrowings
The carrying amounts of these financial instruments approximate their net fair value because interest is charged at the current prevailing market rate.

Derivative Transactions (currency options, metals futures and commodity swaps)
The net fair value of all derivative transactions is measured using the marked-to-market valuation calculation as at 31 December 2003. At balance date the marked-to-market position of the outstanding financial transactions was as follows:

	Consolidated Dec 2003
	$m
Metals futures	6.3
Total	**6.3**
Less:	
Provided in Statement of Financial Position	—
Net unrecognised fair value of financial instruments exposure	**6.3**

Liquidity Risk
Liquidity risk arises from the possibility that a market for derivates may not exist in some circumstances. To counter this risk, the consolidated entity only uses derivatives in highly liquid markets.

16. Contingent Liabilities

Guarantees

Upon its listing, Zinifex Limited will, with certain exceptions, assume the guarantees of all the obligations of Pasminco Group Treasury Pty Ltd.

As at the date of issuing this prospectus Pasminco Limited has guaranteed the obligations of certain controlled entities in relation to Bankers' Undertakings provided by the Company's bankers to the Workers' Compensation authorities. Upon its listing, Zinifex Limited will assume all of the obligations of these guarantees.

Certain bank guarantees have been provided in connection with the operations of the consolidated entity.

Legal Actions

There are certain actual or potential claims against entities within the Group which are immaterial. No provision has been made in the financial report in respect of such claims.

Other

The consolidated entity has contingent liabilities in respect of termination benefits, which may arise pursuant to agreements entered into with certain management employees. The amount of each contingent liability is dependent upon the circumstances in which the employment is terminated and therefore cannot be quantified.

Under the Separation, Transitional and Shared Services Deed, Zinifex Limited has agreed that if a residual group company has a tax liability in respect of a year ending prior to or on 30 June 2003, that it will, if requested by the residual group company, take action necessary to transfer tax losses for years ending prior to and including 30 June 2003. The amount of any tax loss transferred is limited to A$707 million under the Separation, Transitional and Shared Services Deed.

17. Commitments for Expenditure

	Notes	31 December 2003 $000's
(a) Capital Commitments		
Commitments for acquisition of plant and equipment contracted for at the reporting date but not recognised as liabilities payable:		
Within one year		4.1
Later than one year but not later than five years		—
		4.1
(b) Lease Commitments		
Commitments in relation to leases contracted for at the reporting date but not recognised as liabilities payable:		
Non-cancellable operating leases:		
Within one year		18.0
Later than one year and not later than five years		31.4
Later than five years		23.4
		72.8

18. Superannuation Commitments

The commitments not provided for in the accounts of the consolidated entity as at 31 December 2003 are as follows.

Consolidated entity companies participate in a number of superannuation and retirement benefit plans. The plans provide benefits on retirement, disablement, death, retrenchment or withdrawal from service, the principal types of benefits being lump sum defined benefits and lump sum accumulation benefits. Contributions are made by employees and the employing corporations as percentages of salary or wages or specified dollar amounts as required by the relevant trust deeds.

The latest actuarial assessments for those plans subject to actuarial supervision were as follows:

Pasminco Superannuation Plan, reviewed as at 1 July 2002 by R.R Codron FIAA of William M Mercer Pty Ltd.

Pasminco Zinc Inc. Hourly Employees' Pension Plan, Pasminco Zinc Inc. Salaried Employees' Retirement Plan, The Pension Plan of Pasminco Zinc Inc. for Bargaining Unit Employees, and PZI/JC Pension Plan for Bargaining Unit Employees all had actuarial assessments performed as at 1 January 2003 by J.C Thacker EA of Bryan, Pendleton, Swats & McAllister, LLC.

As at 1 July 2002, the Pasminco Superannuation Plan's assets were sufficient to satisfy all benefits that would have been vested under the Plan in the event of: termination of the Plan; voluntary termination of the employment of each employee on the initiative of that employee; and compulsory termination of the employment of each employee by the employer.

As at 1 January 2003, the plans had a surplus of funds, based on accrued benefits of A$1.3 million (US$0.9 million) at 1 January 2003.

With the exception of the contribution obligations in respect of those members of the Pasminco Superannuation Plan who were members of the CRA Staff Provident Fund immediately prior to joining the Pasminco Superannuation Plan, the contribution obligations to the respective plans are legally enforceable only up to the date upon which any such obligation is terminated by appropriate action pursuant to the relevant trust deed, subject to the terms of any relevant award or agreement. In respect of the former members of the CRA Staff Provident Fund, the obligation to contribute is enforceable to the extent necessary to finance the defined benefits provided under the Rules of the Pasminco Superannuation Plan in relevant circumstances.

The accrued benefits and Plan assets at net market value at the previous actuarial review dates, together with the Plan assets at net market value and the vested benefits disclosed in the Plan's most recently available statements, are as follows:

	Pasminco Superannuation Plan $'000	Pasminco Zinc Plans $'000
Plan assets at net market value at actuarial review date	110,155	27,650
Accrued benefits at actuarial review date	109,964	26,346
Excess of Plan assets over accrued benefits	191	1,304
Date of most recent actuarial review	01/07/02	01/01/03
Plan assets at net market value at most recently available year end	97,159	27,650
Vested benefits at most recently available year end	97,114	25,731
Date of most recent year end	30/06/03	31/12/02

Notes

1. Accrued benefits have been determined at the most recent actuarial review. These amounts represent the present value of the benefits that the Plan is presently obliged to pay at some future date as a result of membership of the Plan as at the date of the actuarial review.
2. Vested benefits are benefits that are not conditional upon the continued membership of the Plan or any factor other than resignation from the Plan.
3. United States dollar denominated amounts relating to US Operations Plans have been converted to Australian currency at A$1=US$0.6711.
4. Additional contributions have been made during the year in relation to those employees who are members of the Defined Benefit plans within the Pasminco Superannuation Plan as recommended by the Group's actuary.

19. Segment Information

Primary Reporting – Business

Segments 30 June 2003	Century $m	Rosebery $m	Hobart $m	Budel $m	Clarksville $m	Port Pirie $m	ARA $m	Corporate/Other $m	Intersegment $m	Total $m
Sales revenue	416.7	98.3	402.2	337.8	181.9	464.2	16.0	5.7	(300.4)	**1,622.4**
Other revenue	0.1	0.1	2.6	0.1	—	2.0	—	0.5	(3.7)	**1.7**
Total Revenue	416.8	98.4	404.8	337.9	181.9	466.2	16.0	6.2	(304.1)	**1,624.1**
EBITDA	**134.5**	**30.6**	**28.1**	**28.1**	**(3.8)**	**21.4**	**1.7**	**(59.8)**	**(1.6)**	**179.2**
Depreciation and amortisation	(143.6)	(20.4)	(21.2)	(16.2)	(3.1)	(17.3)	(0.3)	(0.9)	—	**(223.0)**
EBIT	**(9.1)**	**10.2**	**6.9**	**11.9**	**(6.9)**	**4.1**	**1.4**	**(60.7)**	**(1.6)**	**(43.8)**
Capital Expenditure										
- Mine development	113.5	7.5	—	—	—	—	—	—	—	**121.0**
- Other	13.1	16.2	22.5	4.6	3.4	13.2	—	3.2	—	**76.2**

Primary Reporting – Business

Segments 30 June 2002	Century $m	Rosebery $m	Hobart $m	Budel $m	Clarksville $m	Port Pirie $m	ARA $m	Corporate/Other $m	Intersegment $m	Total $m
Sales revenue	373.5	99.0	475.5	349.1	207.5	474.0	17.7	231.1	(392.0)	**1,835.4**
Other revenue	0.2	0.4	2.3	0.3	0.2	1.1	—	(0.7)	—	**3.8**
Total Revenue	373.7	99.4	477.8	349.4	207.7	475.1	17.7	230.4	(392.0)	**1,839.2**
EBITDA	**172.6**	**25.2**	**82.9**	**36.3**	**7.5**	**51.8**	**4.7**	**(83.7)**	**0.7**	**298.0**
Depreciation and amortisation	(139.6)	(20.8)	(26.5)	(15.5)	(2.7)	(25.1)	(0.3)	(2.5)	—	**(233.0)**
EBIT	**33.0**	**4.4**	**56.4**	**20.8**	**4.8**	**26.7**	**4.4**	**(86.2)**	**0.7**	**65.0**
Capital Expenditure										
- Mine development	126.6	10.7	—	—	—	—	—	—	—	**137.3**
- Other	12.1	9.2	10.6	11.1	3.7	28.9	—	12.6	—	**88.2**

Primary Reporting – Business

Segments 30 June 2001	Century $m	Rosebery $m	Hobart $m	Budel $m	Clarksville $m	Port Pirie $m	ARA $m	Corporate/Other $m	Intersegment $m	Total $m
Sales revenue	427.6	112.3	477.0	488.0	270.3	401.7	16.4	1,037.7	(1,365.9)	**1,865.1**
Other revenue	3.2	3.6	8.3	0.2	0.8	1.1	—	0.1	—	**17.3**
Total Revenue	430.8	115.9	485.3	488.2	271.1	402.8	16.4	1,037.8	(1,365.9)	**1,882.4**
EBITDA	**213.8**	**47.5**	**107.4**	**89.8**	**29.7**	**47.3**	**4.6**	**(88.6)**	**18.9**	**470.4**
Depreciation and amortisation	(157.7)	(17.7)	(26.6)	(15.3)	(19.7)	(22.0)	(0.3)	(10.9)	—	**(270.2)**
EBIT	**56.1**	**29.8**	**80.8**	**74.5**	**10.0**	**25.3**	**4.3**	**(99.5)**	**18.9**	**200.2**
Capital Expenditure										
- Mine development	130.3	11.4	—	—	—	—	—	—	—	**141.7**
- Other	36.3	9.1	33.0	10.3	13.9	36.5	—	17.0	—	**156.1**

Primary Reporting – Business

Segments 31 December 2002	Century $m	Rosebery $m	Hobart $m	Budel $m	Clarksville $m	Port Pirie $m	ARA $m	Corporate/Other $m	Intersegment $m	Total $m
Sales revenue	233.0	52.9	203.4	167.8	93.0	235.9	7.8	2.6	(170.7)	**825.7**
Other revenue	—	0.3	1.5	0.6	—	1.6	—	0.4	—	**4.4**
Total Revenue	233.0	53.2	204.9	168.4	93.0	237.5	7.8	3.0	(170.7)	**830.1**
EBITDA	**84.2**	**17.7**	**28.9**	**17.5**	**1.2**	**12.5**	**1.1**	**(25.5)**	**(6.6)**	**131.0**
Depreciation and amortisation	(71.6)	(10.1)	(10.9)	(8.0)	(1.3)	(8.4)	(0.1)	(0.4)	—	**(110.8)**
EBIT	**12.6**	**7.6**	**18.0**	**9.5**	**(0.1)**	**4.1**	**1.0**	**(25.9)**	**(6.6)**	**20.2**
Capital Expenditure										
- Mine development	57.8	3.0	—	—	—	—	—	—	—	**60.8**
- Other	8.4	9.9	13.1	3.0	0.8	8.6	—	1.5	—	**45.3**

Primary Reporting – Business

Segments 31 December 2003	Century $m	Rosebery $m	Hobart $m	Budel $m	Clarksville $m	Port Pirie $m	ARA $m	Corporate/Other $m	Intersegment $m	Total $m
Sales revenue	238.5	56.0	196.2	177.5	78.2	216.9	8.4	6.2	(202.0)	**775.9**
Other revenue	0.1	(0.1)	0.5	0.1	—	0.5	—	2.2	—	**3.3**
Total Revenue	238.6	55.9	196.7	177.6	78.2	217.4	8.4	8.4	(202.0)	**779.2**
EBITDA	**121.0**	**24.4**	**(0.8)**	**18.8**	**(2.9)**	**10.3**	**1.5**	**(25.1)**	**(16.2)**	**131.0**
Depreciation and amortisation	(82.9)	(11.9)	(10.6)	(7.4)	(0.2)	(5.6)	(0.2)	(0.4)	—	**(119.2)**
EBIT	**38.1**	**12.5**	**(11.4)**	**11.4**	**(3.1)**	**4.7**	**1.3**	**(25.5)**	**(16.2)**	**11.8**
Total Assets	885.7	140.6	335.7	337.3	90.1	305.5	29.1	68.2	(105.6)	**2,086.6**
Total Liabilities	287.6	44.3	123.9	222.7	41.1	111.0	7.4	114.1	(105.1)	**847.0**
Capital Expenditure										
- Mine development	53.2	2.0	—	—	—	—	—	—	—	**55.2**
- Other	5.6	0.2	4.1	2.3	—	1.9	—	1.0	—	**15.1**

Secondary Reporting -

Geographical Segments for the Six Months Ended 31 December 2003 and 31 December 2002

	Australia		Europe		USA		Intersegment		Corporate/Other		Total	
	Dec 2003 $m	Dec 2002 $m	Dec 2003 $m	Dec 2002 $m	Dec 2003 $m	Dec 2002 $m	Dec 2003 $m	Dec 2002 $m	Dec 2003 $m	Dec 2002 $m	Dec 2003 $m	Dec 2002 $m
Total Revenue	717.0	736.4	177.6	168.4	78.2	93.0	(202.0)	(170.7)	8.4	3.0	**779.2**	**830.1**
Total Assets	1,687.9		337.3		90.1		(28.7)		—		**2,086.6**	
Total Liabilities	611.9		222.7		41.1		(28.7)		—		**847.0**	
Capital Expenditure												
- Mine development	55.2	60.8	—	—	—	—	—	—	—	—	**55.2**	**60.8**
- Other	11.8	40.0	2.3	3.0	—	0.8	—	—	1.0	1.5	**15.1**	**45.3**

Secondary Reporting –

Geographical Segments for Years Ended 30 June 2003, 30 June 2002 and 30 June 2001

	Australia			Europe			USA			Intersegment			Corporate/Other			Total		
	2003 $m	2002 $m	2001 $m	2003 $m	2002 $m	2001 $m	2003 $m	2002 $m	2001 $m	2003 $m	2002 $m	2001 $m	2003 $m	2002 $m	2001 $m	2003 $m	2002 $m	2001 $m
Total Revenue	1,402.2	1,443.7	1,451.2	337.9	349.4	488.2	181.9	207.7	271.1	(304.1)	(392.0)	(1,365.9)	6.2	230.4	1,037.8	**1,624.1**	**1,839.2**	**1,882.4**
Capital Expenditure																		
- Mine development	121.0	137.3	141.7	—	—	—	—	—	—	—	—	—	—	—	—	**121.0**	**137.3**	**141.7**
- Other	65.0	60.8	114.9	4.6	11.1	10.3	3.4	3.7	13.9	—	—	—	3.2	12.6	17.0	**76.2**	**88.2**	**156.1**

Compilation of segment information:

The division of the consolidated entity's results and assets into business and geographical segments has been ascertained by reference to direct identification of assets and revenue/cost centres and where interrelated segment costs exist, an allocation has been calculated on a pro-rata basis of the identifiable assets and/or costs. Intersegment pricing is on an arms-length market basis.

20. Related Parties

Transactions with entities in the wholly owned Group during the periods included sales on a commercial basis, interest charged/earned on a commercial basis, dividends paid and received, hedging transactions, asset sales, borrowings on a commercial basis and tax loss transfers.

21. Joint Ventures

A controlled entity, Pasminco International (Holdings) Pty Ltd, participates in the Genesis joint venture in China, which manufactures and sells alloy products. The interest is held through a 42.5% shareholding in Genesis Recycling Technology (BVI) Ltd.

A controlled entity, Pasminco Port Pirie Smelter Pty Limited, participates in the Australian Refined Alloys (ARA) joint venture to produce and market lead alloys ex-secondary materials. Pasminco Port Pirie Smelter Pty Limited has a 50% interest in the assets, liabilities and output of this joint venture. The share of assets employed in the ARA joint venture is included in the pro forma consolidated statement of financial position under the following classifications.

	31 December 2003 $000's
Current assets	
Inventories	0.6
Other	1.1
Total current assets	1.7
Non-current assets	
Plant & equipment – at cost	27.4
Total non-current assets	27.4
Share of assets employed	29.1

22. Subsequent Events

On 3 December 2003 the company announced that it had entered an agreement with Dutch based trading company Trafigura Beheer B.V. Under the agreement which commenced on 1 January 2004, Trafigura has agreed to undertake the international sales and marketing of Pasminco's zinc and lead metal commodity grades from its Hobart and Port Pirie smelters. This arrangement will reduce the level of inventories on hand, decrease our receivables, lower the cost of sales and result in an overall net improvement in the net return achieved on metals sales.

ANNEX A
DEFINITIONS AND GLOSSARY

Definitions

Certain industry terms and definitions have been used throughout this Institutional Offering Memorandum, unless stated otherwise. These terms and definitions are defined in the glossary section of the "Independent Technical Review Report" in Annex E of this Offering Memorandum. In addition, the following definitions have been used throughout this Institutional Offering Memorandum, unless stated otherwise.

Bookbuild	The Bookbuild process as described in "Global Offering".
CHESS	Clearing House Electronic Subregistry System operated by the ASX Settlement and Transfer Corporation Pty Limited for the clearing and settlement of transactions in CHESS approved securities, the transfer of securities and the registration of transfers.
Citigroup	Citigroup Global Markets Australia Pty Limited.
Deutsche Bank	Deutsche Bank AG.
Joint Lead Managers (or JLMs)	Citigroup, Deutsche Bank and UBS.
QIBs	Qualified Institutional Buyers as defined in Rule 144A under the Securities Act.
SCH	The clearing and settlement facility under the *Corporations Act* operated by the ASX Settlement and Transfer Corporation Pty Ltd as licensee.
SCH Business Rules	The SCH business rules issued by ASX Settlement and Transfer Corporation Pty Limited (ACN 008 504 532).
Share Registry	Computershare Investor Services Pty Limited.
UBS	UBS AG, Australia branch.
URS	URS Australia Pty Limited (ABN 46 000 691 690).

ANNEX B
SIGNIFICANT DIFFERENCES BETWEEN AUSTRALIAN GAAP AND US GAAP

Background

The pro forma historical financial information ("the Relevant Financial Information") of Zinifex Limited as presented in the Institutional Offering Memorandum ("IOM"), is prepared in accordance with the measurement and recognition requirements, but not all of the disclosure requirements, of Accounting Standards and other mandatory financial reporting requirements in Australia ("AGAAP"), which differ in certain material respects from Generally Accepted Accounting Principles applicable in the United States ("USGAAP"). Certain differences between AGAAP applicable to the Relevant Financial Information and USGAAP are summarised below. This summary should not be construed as being exhaustive. In making an investment decision, investors must rely upon their own examination of the Zinifex Group, the terms of the offering and the Relevant Financial Information. Potential investors should consult their own professional advisors for an understanding of the differences between AGAAP and USGAAP, and how these differences might affect that Relevant Financial Information. Additionally, no attempt has been made to identify all disclosure, presentation or classification differences that would affect the manner in which transactions and events are presented in the Relevant Financial Information. Further, no attempt has been made to identify future differences between AGAAP and USGAAP as a result of prescribed changes in accounting standards. Regulatory bodies that promulgate AGAAP and USGAAP have significant projects ongoing that could affect future comparisons such as this one. Finally, no attempt has been made to identify all future differences between AGAAP and USGAAP, which may affect the Relevant Financial Information as a result of transactions or events that may occur in the future.

1. Basis of Presentation

Preparation of Financial Information

Under AGAAP, there is no specific accounting guidance on the preparation of Carve-Out historical financial information and as a result it is considered acceptable to include adjustments to remove the effect of transactions that are not expected to be applicable to the ongoing operations of the Zinifex Group.

Under USGAAP, the preparation of Carve-Out historical financial information requires the inclusion of all revenues and costs directly and indirectly attributable to the carved-out entities ("the Carve-Out") by segregation of the amounts related to the operation of the Carve-Out from those related to the operations retained by the parent company. In addition, expenses should be allocated to the Carve-Out on a reasonable and consistent basis so as to be representative of the costs that would have been incurred if the Carve-Out had operated on a stand-alone basis. No adjustments are made to remove the effect of transactions that are not expected to be applicable to the ongoing operations of the Carve-Out.

Article 11 of Regulation S-X of the United States Securities and Exchange Commission ("US SEC") provides guidelines for the preparation of pro forma financial information. Pro forma income statements are presented assuming the pro forma transactions had been consummated at the beginning of the fiscal year presented and include adjustments which give effect to events that are (i) directly attributable to the transaction, (ii) expected to have a continuing impact on the company, and (iii) factually supportable. Pro forma adjustments related to the pro forma balance sheet are computed assuming the transaction was consummated at the end of the most recent period for which a balance sheet is required to be presented and includes adjustments which give effect to events that are directly attributable to the transaction and factually supportable regardless of whether they have a continuing impact or are non-recurring. Material non-recurring items included in the historical income statement from which the pro forma income statement is derived are not removed in preparing the pro forma income statement.

Transfers Between Entities Under Common Control

The restructuring of Pasminco Limited ("Subject to Deed of Company Arrangement") to form the Zinifex Limited Group, would under AGAAP be accounted for as a business combination using purchase accounting (i.e., using fair values).

Under USGAAP, transfers between entities under common control are not considered business combinations and are accounted for at historical cost in a manner similar to that required for a pooling of interests.

2. Comprehensive Income

Under AGAAP, there is no such concept as "comprehensive income" although all non-owner changes in equity must be reported in the complete statement of financial performance.

Under USGAAP, comprehensive income is defined as the change in equity of a business enterprise from transactions and other events and circumstances from non-owner sources. The purpose of reporting comprehensive income is to report all changes in equity of an enterprise that result from recognised transactions and other economic events of a period other than transactions with owners in their capacity as owners. Comprehensive income consists of the following:

- net income;
- unrealised holding gains and losses on available-for-sale securities;
- foreign currency translation adjustments;
- the excess of the minimum pension liability in excess of unrecognised prior service costs;
- gains and losses on foreign currency transactions designated as, and effective as, economic hedges of a net investment in a foreign entity;
- gains and losses from derivatives that qualify as cash flow hedges; and
- change in the fair value of a futures contract that qualifies as a hedge of an asset, prior to the adoption of SFAS No. 133.

Under USGAAP, all items that are recognised under accounting standards as components of comprehensive income must be reported separately in a financial statement in the period they are recognised. USGAAP also requires the display of an amount representing total comprehensive income in a financial statement that is displayed with equal prominence as other financial statements. The accumulated total of other comprehensive income is also required to be disclosed in the equity section of the balance sheet.

3. Income Taxes

Under AGAAP, deferred tax amounts are recognised in relation to timing differences where items of revenue or expense are recognised for accounting and tax purposes in different periods. Deferred tax amounts are measured using enacted tax rates expected to be applicable to taxable income in the periods in which the deferred tax amount is expected to be settled or realised. Deferred tax assets in relation to carry forward tax losses are recognised where realization is "virtually certain." Deferred tax assets in relation to timing differences are recognised when realisation is assured beyond reasonable doubt.

Under AGAAP, to the extent that the difference between the book value of the asset and the tax basis is non-taxable, this difference and the subsequent depreciation of these assets will be accounted for as a permanent difference for tax effect accounting purposes.

Under AGAAP, Zinifex has recognised a deferred tax liability based on the net present value of the difference between the fair value of the acquired assets and the tax basis.

Under USGAAP, deferred tax amounts are recognised on the temporary differences between the tax bases of assets and liabilities and their book values that will result in taxable or tax deductible amounts in future years. They are measured using enacted tax rates expected to be applicable to taxable income in the periods in which the deferred tax liability or asset is expected to be settled or realised. Deferred tax liabilities are usually recognised for all taxable temporary differences. Deferred tax assets, including those arising from carry forward tax losses, are recognised in full unless it is "more likely than not" that some portion or all of the deferred tax assets will not be realised. "More likely than not" means a level of likelihood that is greater than fifty percent. Discounting deferred taxes is prohibited under USGAAP.

4. Accounting for Non-Current Assets

Under AGAAP, the recoverable amount of non-current assets is the net amount expected to be recovered through the cash inflows and outflows arising from their continued use and subsequent disposal.

The carrying amounts of non-current assets valued using the cost basis are reviewed to determine whether they are in excess of their recoverable amount at balance date. Where the carrying amount of a non-current asset is greater than its recoverable amount, the asset is written down to its recoverable amount. Where net cash inflows are derived from a group of assets working together, recoverable amount is determined on the basis of the relevant group of assets. The decrease in the carrying amount is recognised as an expense in the statement of financial performance in the reporting period in which the write-down occurs.

Although AGAAP does not specify whether or not cash flows are to be discounted, the expected net cash flows included in determining recoverable amounts of non-current assets for Zinifex are discounted to their present values using the average interest rate applicable to the group.

Under USGAAP, assets are reviewed for impairment when "indicators of impairment" are present. If such indicators are present, a recoverability test is performed by comparing the sum of the estimated undiscounted future cash flows attributable to the assets in question to their carrying amounts. If the undiscounted cash flows used in the test for recoverability are less than the long-lived asset's carrying amount, an impairment loss is recognised if the carrying amount of the long-lived asset exceeds its fair value. In the absence of a liquid market in the asset, the fair value is the present value of the future cash flows associated with the asset.

5. Retirement Benefits

Zinifex's retirement benefit plans include superannuation and retirement benefit plans. The plans provide benefits on retirement, disablement, death, retrenchment or withdrawal from service, the principal types of benefits being lump sum benefits and lump sum accumulation benefits. Under AGAAP, the contributions made to pension plans are charged against income in the period to which they relate. Where the pension plans are defined benefit plans and the plans are in surplus no contribution is required to be made nor charged against income. Further, no asset or liability is recognised in relation to funding surpluses or deficits.

Under USGAAP, an amount equal to the "net periodic pension cost" is charged to the income statement to recognise the cost of an employee's pension over that employee's service period regardless of the actual contributions made during the period. The net periodic pension cost includes an actuarially determined amount equal to the present value of future benefits, which have accrued during the period under the projected benefit

obligation method (service cost), an interest cost that reflects the increase in the projected benefit obligation due to the passage of time and the expected return on scheme assets, amortisation of unrecognised prior service costs and asset and liability gains or losses. Where contributions differ from the net pension cost, an asset representing prepaid pension costs or a liability for unfunded accrued pension costs arises and the asset or liability is recorded in the balance sheet.

6. Employee Share/Option Plan

Under AGAAP, no remuneration expense is recognised in the statement of financial performance in respect of employee options or shares issued.

Under USGAAP, compensation expense is recognised based on either the fair value or the intrinsic value of the shares or options at the date of issuance, depending upon whether the approach in Statement of Financial Accounting Standards ("SFAS") No. 123, "Accounting for Stock-based Compensation" ("SFAS 123") or the approach in Accounting Principles Board Opinion ("APB") No. 25, "Accounting for Stock Issued to Employees," ("APB 25") is followed.

Under APB 25, compensation, if any, is recognised based on the difference between the exercise price for options or the issue price for shares and the fair value of the Company's stock on the measurement date, as defined. Under SFAS 123, measurement of compensation is made at the date of grant based on the fair value of the option at that date.

7. Derivative Financial Instruments and Hedging Activities

Under AGAAP, generally if a hedging relationship is established, the derivative instrument is not recognised until the underlying hedged transaction is recognised. Accordingly, hedge gains and losses are included in the statement of financial performance when the gains and losses arising from the related hedged position are recognised in the statement of financial performance. The hedge gains and losses are incorporated in the measurement of the related hedged item (for example sales).

Under Statement of Financial Accounting Standards No. 133, *Accounting for Derivative Instruments,* ("FAS 133"), derivatives represent rights or obligations that meet the definition of assets and liabilities and as such should be reported in the financial statements at fair value. The fair value of a derivative instrument intended for a hedging activity should be measured at inception. Where changes in this fair value offset changes in the fair value of a known or anticipated exposure being hedged, within certain parameters, it is considered highly effective. The accounting for hedging transactions varies based on the type of hedge: fair value, cash flow, or net investments in foreign operations. In a fair value hedge, changes in the fair value of both the derivative and the hedged item attributable to the risk being hedged are recognized in earnings. In a cash flow hedge, to the extent the hedge is effective, changes in the fair value of the derivative are recognized as a component of other comprehensive income until the hedged transaction affects earnings. In a hedge of foreign currency exposures in a net investment in a foreign operation, to the extent the hedge is effective, the change in the fair value of the derivative is treated as a translation gain/loss and recognized in other comprehensive income offsetting other translation gains/losses arising in consolidation. Derivative transactions that do not meet the definition of a hedge and the ineffective portion of a hedge are recognized in income (as a gain or loss), thus creating potential volatility in income.

FAS 133 also requires the evaluation of contracts to determine if they contain embedded derivatives. Generally, if the economic characteristics and risks of the embedded derivative are clearly and closely related to the economic characteristics and risks of the host contract, it is outside the scope of FAS 133, and the accounting for the derivative is based on the accounting for the host instrument. On the other hand, when the economic characteristics and risks of the embedded derivative are not clearly and closely related to the economic characteristics and risks of the host instrument, the embedded derivative should be separated and accounted for as a derivative instrument under FAS 133.

8. Research and Development

Under AGAAP, costs incurred on research and development projects are deferred to future periods to the extent they are expected beyond any reasonable doubt to be recoverable.

Under USGAAP, all research and development costs are expensed when incurred.

9. Restructuring Costs Recognised in a Business Combination

Under AGAAP, a liability for restructuring costs is recognised as at the date of acquisition of an entity or part thereof when there is a demonstrable commitment to a restructuring of the acquired entity and a reliable estimate of the amount of the liability can be made.

Under USGAAP, a liability for restructuring costs is recognised as of the date of the acquisition if all of the following conditions are met:

- As of the consummation date of the acquisition, management having the appropriate authority begins to assess and formulate a plan to exit an activity of the acquired company.

- As soon as possible after the consummation date, management having the appropriate authority, completes an assessment of what activities of the acquired company to exit, and approves and commits the combined company to the plan. Although the time required will vary with the circumstances, the finalisation of the plan cannot occur beyond one year from the consummation date of the acquisition.

- The plan specifically identifies all significant actions to be taken to complete the plan, activities of the acquired company that will not be continued, including the method of disposition and location of those activities, and the plan's expected date of completion.

- Actions required by the plan will begin as soon as possible after the plan is finalised and the period of time to complete the plan indicates that significant changes to the plan are not likely.

The costs resulting from a plan to exit an activity of an acquired company should be recognised as an assumed liability at the consummation date of the acquisition only if the cost is not associated with or is not incurred to generate revenues of the combined entity after the consummation date, and it meets either of the following criterion:

- The cost has no future economic benefit to the combined company, is incremental to other costs incurred by either the acquired company or the acquiring company in the conduct of activities prior to the consummation date, and will be incurred as a direct result of the plan to exit an activity of the acquired company. The term "incremental" does not contemplate a diminished future economic benefit to be derived from the cost but, rather, the absence of the cost in either company's activities immediately prior to the consummation date.

- The cost represents an amount to be incurred by the combined company under a contractual obligation of the acquired company that existed prior to the consummation date and will either continue after the plan is completed with no economic benefit to the combined company or will be a penalty incurred by the combined company to cancel that contractual obligation.

10. Revenue Recognition

Under AGAAP, the gross proceeds on disposal of non-current monetary assets are brought to account as revenue from ordinary activities.

Under USGAAP, net gain or loss on sale of non-current assets is disclosed in operating or non-operating income, as appropriate.

11. Exploration, Evaluation and Development Expenditure

Exploration Costs

Under AGAAP, exploration costs can be capitalised provided the Company has legal title to the mineral rights, and either the Company expects to recoup such costs through successful development and exploitation or sale, or exploration activities have not reached a stage at the balance sheet date which permits a reasonable assessment of the existence or otherwise of economically recoverable reserves, and active and significant operations in, or in relation to, the area of interest are continuing.

Under USGAAP amounts expended on exploration should be expensed until such time as a feasibility study has been completed that supports the existence of a commercially mineable reserve.

Acquisitions

Under AGAAP, the fair value allocated to acquired mineral properties is generally determined based on the estimated economic reserves. The term estimated economic reserves is not defined and in practice may include reserves and resources. Further, the Zinifex Group prepares mineral reserve statements based on the Australasian Code for reporting of Mineral Resources and Ore Reserves, September 1999 (the JORC Code).

Under USGAAP, the fair value allocated to acquired mineral properties is based on proven and probable reserves only. To the extent that the fair value relates to resources, this value is allocated to "undeveloped mineral interests". Under USGAAP, reserve statements reported to the SEC are prepared with reference to the SEC's Industry Guide 7.

Depreciation and Amortisation

Under AGAAP, capitalised exploration, evaluation and development expenditure is amortised over the current estimated economic reserve of the area of interest on a units of production output basis.

USGAAP does not permit capitalisation of exploration and evaluation expenditures, which would result in no depreciation or amortization of such costs. Under USGAAP, capitalised development expenditure is amortised only over proven and probable reserves of the area of interest on a units of production output basis. Therefore under USGAAP there may be a difference in depreciation and amortisation charges.

12. Functional Currency and Foreign Currency Translation

Under AGAAP, all Australian reporting entities must prepare and present their financial statements in Australian dollars ("AUD"). All other currencies are treated as a foreign currency and translation of these transactions into AUD is required with the resulting realised and unrealised exchange gains and losses being included in the determination of profit from ordinary activities (except in relation to certain hedges, see "Derivatives Financial Instruments and Hedging Activities" in section 7 above).

Under USGAAP, the assets, liabilities, and operations of an entity must be measured using the functional currency of that entity. The functional currency is the currency of the primary economic environment in which the entity operates; normally, it will be the currency of the economic environment in which cash is generated and expended by the entity. The functional currency can be the US dollar or another currency.

The economic factors relevant in determining a company's functional currency under USGAAP include:

- Cash flows related to the entity's individual assets and liabilities;
- Determination of sales prices for the entity's products;

- The sales market for the entity's products;
- Location of primary expenses, i.e., labour, materials, and other costs for the entity's products or services; and
- Currency in which financing is primarily denominated.

Further, under USGAAP, a company may present its financial statements in a currency other than its functional currency. Translation adjustments arising from the re-measurement of an entity's financial statements from functional to presentation currency are recorded in other comprehensive income.

13. Start-Up Costs

Under AGAAP costs associated with start-up activities at new plants or operations which are incurred prior to commissioning date, are capitalised as part of property, plant and equipment. These capitalised costs are depreciated in subsequent years.

Under USGAAP, costs of start-up activities are expensed as incurred.

14. Guarantees

Under AGAAP, guarantees are disclosed as contingent liabilities and are not recognised in the financial statements unless and until they become future sacrifices of economic benefits that the entity is presently obliged to make to other entities as a result of past transactions or other past events.

Under USGAAP, contracts or indemnification agreements that contingently require the guarantor to make payments to the guaranteed party based on changes in an underlying that is related to an asset, liability, or an equity security of the guaranteed party, must be recognised in the financial statements at fair value.

15. Restoration and Rehabilitation Costs

Under AGAAP a provision for the restoration and rehabilitation of operating locations is recorded where a present legal or constructive obligation exists. The estimated restoration and rehabilitation costs, measured in present day dollars, are provided for over the useful life of the asset. Changes in the estimated cost are provided for prospectively.

Under USGAAP, a provision for restoration and rehabilitation is recorded when there is a legal obligation for the retirement of tangible long-lived assets that result from the acquisition, construction, development or the normal operations of a long-lived asset. In situations in which no law, statute, ordinance or contract exists, but a company makes a promise to a third-party about its intention to perform retirement activities, determination of whether a legal obligation exists is made within the framework of the doctrine of promissory estoppel. The expected cost of a restoration program is capitalised at the date of the obligating event (e.g., when construction begins if the obligation arises from construction or when contamination occurs if the obligation arises from use). At the same time, a provision is brought to account for the fair value of the restoration obligation. When a quoted market price in an active market is not available to determine fair value, USGAAP requires that the liability be calculated using a probability-weighted expected cash flow approach, using a credit-adjusted risk-free interest rate. The capitalised cost is amortised over the life of the related asset and the provision is accreted periodically as the discount unwinds.

16. Environmental Remediation Liabilities

Under AGAAP, there is no accounting standard which specifically addresses the accounting for environmental remediation liabilities. Effective July 1, 2002, AASB 1044, "Provisions, Contingent Liabilities and Contingent Assets" ("AASB 1044") addresses the accounting for certain liabilities, provisions and

contingencies. Prior to the issuance of AASB 1044, there were no authoritative pronouncements under AGAAP specifically addressing accounting for provisions and contingencies.

Under USGAAP, an entity is required to accrue at least the minimum amount that can reasonably be estimated as an environmental remediation liability if litigation, a claim, or an assessment has been asserted, or is probable of assertion, and if the entity is associated with the site (e.g., by virtue of being a current or past owner or operator of a site). In estimating its allocable share of costs, an entity should include incremental direct costs of the remediation effort and post remediation monitoring costs that are expected to be incurred after the remediation is complete. An entity should also include in its estimate, costs of compensation and related benefit costs for employees who are expected to devote a significant amount of their time directly to the remediation effort (including internal legal staff).

17. Variable Interest Entities

US Financial Accounting Standards Board Interpretation No. 46 ("FIN 46"), *Consolidation of Variable Interest Entities*, addresses the consolidation of business enterprises to which the usual condition of consolidation, a controlling voting interest, does not apply. The FIN 46 model determines control (and consolidation) of a variable interest entity ("VIE") based on the potential variability in its variable interest holders' gains and losses. The scope of FIN 46 is so broad, virtually every entity preparing financial statements in accordance with USGAAP may be affected by its provisions. VIEs include many entities that have previously been referred to as special purpose entities (SPEs), but also may include many other entities not previously thought of as SPEs. Variable interests in an entity may arise from financial instruments, service contracts, guarantees, leases or other arrangements with the VIE. An entity that will absorb a majority of the variable interest entity's expected losses or expected residual returns, as defined in FIN 46, is considered the primary beneficiary of the variable interest entity. The primary beneficiary must include the variable interest entity's assets, liabilities and results of operations in its consolidated financial statements.

In general, a variable interest entity is subject to consolidation pursuant to the Interpretation's provisions if it has (1) an insufficient amount of equity for the entity to carry on its principal operations without additional subordinated financial support provided by any parties, (2) a group of equity owners that are unable to make decisions about the entity's activities, or (3) equity that does not absorb the entity's losses or receive the entity's benefits. VIEs are to be evaluated for consolidation based on all contractual, ownership, or other interests that expose their holders to the risks and rewards of the entity. These interests are termed variable interests and include equity investments, loans, leases, derivatives, guarantees, service and management contracts, and other instruments whose values change with changes in the VIE's net assets (excluding variable interests). Any of these instruments may require its holder to consolidate the VIE. The holder of a variable interest that receives the majority of the potential variability in gains or losses of the VIE (with the primary focus on losses) is the VIE's primary beneficiary, and is required to consolidate the VIE.

18. Proportionate Consolidation

Under AGAAP, interests in joint ventures are accounted for by taking up the company's proportionate share of each of the individual assets and liabilities of the joint venture.

Under USGAAP, an investment in an unincorporated legal entity, such a partnerships or joint venture, is accounted for by the equity method. Proportionate gross financial statement presentation (i.e., pro-rata consolidation) is not appropriate unless the investee is in either the construction industry or if its activities are limited to the extraction of mineral resources (and not if its activities involve related activities such as refining, marketing or transporting extracted mineral resources).

19. Postretirement Benefits

Under AGAAP, there is no accounting standard which specifically addresses the accounting for postretirement medical benefits.

Under USGAAP, Statement of Financial Accounting Standards No. 106, *Employers' Accounting for Postretirement benefits Other Than Pensions* ("FAS 106"), requires specific accounting practices for various types of nonpension retirement benefits provided to retired employees, such as health care, dental care, and life insurance benefits. The annual benefit expenses and related liabilities recognized in financial statements are based on the actuarial present values of the total projected benefits expected to be paid. The actuarial present value is referred to as the expected postretirement benefit obligation ("EPBO"). Similar to the process used to measure pension costs, measuring the EPBO requires actuarial techniques and the use of assumptions about future events including assumptions about medical inflation, delivery methods of health care services, intensity of services, and the impact of technological advances in health care. Generally, the amount of the EPBO is allocated on a straight-line basis over the service period to the vesting date, even if the vesting date precedes the expected retirement date. Other components of the net periodic postretirement cost include interest costs, actual return on plan assets, amortization of prior service cost, gains and losses and amortization of the obligation arising upon adoption of the standard.

ANNEX C
SIGNIFICANT DIFFERENCES BETWEEN AUSTRALIAN GAAP AND IAS

Background

Zinifex Limited ("Zinifex") will be required to comply with International Financial Reporting Standards ("IFRS") for its financial year ended 30 June 2006. IFRS encompasses all of the International Financial Reporting Standards, International Accounting Standards ("IAS") and Interpretations. For reporting periods beginning on or after 1 January 2005, compliance of financial reports with the Australian equivalents of IFRS will become a legal requirement for all Australian entities.

The pro forma historical financial information ("the Relevant Financial Information") of Zinifex as presented in this Institutional Offering Memorandum ("IOM") is prepared in accordance with the measurement and recognition requirements, but not all of the disclosure requirements, of Accounting Standards and other mandatory financial reporting requirements in Australia ("AGAAP"), which differ in certain material respects from IFRS.

The following is a summary of the significant differences between AGAAP and IFRS applicable to the Relevant Financial Information.

This summary should not be construed as being exhaustive. In making an investment decision, investors must rely upon their own examination of the Zinifex Group, the terms of the offering and the Relevant Financial Information. Potential investors should consult their own professional advisors for an understanding of the differences between AGAAP and IFRS, and how these differences might affect that Relevant Financial Information. Additionally, no attempt has been made to identify all disclosure, presentation or classification differences that would affect the manner in which transactions and events are presented in the Relevant Financial Information.

Further, no attempt has been made to identify future differences between AGAAP and IFRS as a result of prescribed changes in accounting standards. Regulatory bodies that promulgate AGAAP and IFRS have significant projects ongoing that could affect future comparisons such as this one. Finally, no attempt has been made to identify future differences between AGAAP and IFRS, which may affect the Relevant Financial Information as a result of transactions or events that may occur in the future.

1. Income Taxes

Under AGAAP, deferred tax amounts are recognised in relation to timing differences where items of revenue or expense are recognised for accounting and tax purposes in different periods. Deferred tax amounts are measured using enacted tax rates expected to be applicable to taxable income in the periods in which the deferred tax amount is expected to be settled or realised. Deferred tax assets in relation to carry forward tax losses are recognised where realization is "virtually certain". Deferred tax assets in relation to timing differences are recognised when realisation is assured beyond reasonable doubt.

Under AGAAP, to the extent that the difference between the book value of the asset and the tax basis is non-taxable, this difference and the subsequent depreciation of these assets will be accounted for as a permanent difference for tax effect accounting purposes.

Under AGAAP, Zinifex has recognised a deferred tax liability based on the net present value of the difference between the fair value of the acquired assets and the tax basis.

Under IFRS, IAS 12 'Income Taxes', deferred tax amounts are recognised on the temporary differences between the tax bases of assets and liabilities and their book value that will result in taxable or tax deductible

amounts in future years. Deferred tax liabilities are usually recognised for all taxable temporary differences. Deferred tax assets, including those arising from carry forward tax losses, should be recognised in full to the extent that it is probable that future taxable profit will be available against which the unused tax losses and tax credits can be utilised.

2. Derivative Financial Instruments and Hedging Activities

Under AGAAP, generally if a hedging relationship is established, the derivative instrument is not recognised until the underlying hedged transaction is recognised. Accordingly, hedge gains and losses are included in the statement of financial performance when the gains and losses arising from the related hedged position are recognised in the statement of financial performance. Also under AGAAP, there is no requirement for fair value measurement of derivatives (excluding foreign currency instruments).

Under AGAAP, there is no requirement to classify financial assets in different categories.

Under IFRS, criteria for hedge accounting is more strict and prescriptive than under AGAAP. IAS 39 will require identification and fair value measurement of derivatives. Entities will need to determine whether their hedges meet the requirements for hedge accounting (designation, effectiveness and documentation), and then classify them as either cash flow hedges or fair value hedges. Movements of fair value hedges will be recorded in the Statement of Financial Performance. Cash flow hedge movements will be recorded in equity. If derivatives do not meet the requirements for hedge accounting, gains and losses on these derivatives will be taken to the Statement of Financial Performance.

Under IFRS, an entity will be required to classify its financial assets and financial liabilities under IAS 39 and account for them accordingly. Financial assets will be classified as one of the following:

- financial assets held for trading;
- financial assets held to maturity;
- loans and receivables originated by the entity; and
- available for sale financial assets.

The accounting for these categories of financial assets is as follows:

- *Financial assets held for trading:* should be measured at fair value, with any changes in fair value to be accounted for in income immediately.
- *Financial assets held to maturity:* should be accounted for at amortised cost.
- *Loans and receivables originated by the entity:* should be accounted for at amortised cost.
- *Available for sale financial assets:* should be accounted for at fair value.

IAS 39 requires entities to separate embedded derivatives from the host contract and under certain circumstances to account for them separately.

3. Foreign Currency Translation

Under AGAAP, all Australian reporting entities must prepare and present their financial statements in Australian dollars. All other currencies are treated as a foreign currency and translation of these transactions into

Australian dollars is required with the resulting realised and unrealised exchange gains and losses being included in the determination of profit from ordinary activities (except in relation to certain hedges, see "Derivatives Financial Instruments and Hedging Activities" in section 2 above).

Under AGAAP, the financial reports of a self-sustaining foreign operation must be translated as at the reporting date using the current rate method and any exchange differences must be taken directly to the foreign currency translation reserve within equity and retained in the foreign currency translation reserve until the disposal, or partial disposal, of the foreign operation. When the related foreign entity is sold or liquidated, translated differences accumulated in equity must be transferred to retained earnings.

Under IFRS, IAS 21 'The Effects of Changes in Foreign Exchange Rates' requires each entity to determine their functional currency (being the currency in which the entity measures the items in its financial statements) and measure their financial performance and position in this nominated currency. Functional currency is defined as the currency of the primary economic environment in which the entity operates. Presentation currency is defined as the currency in which the financial statements are presented.

IAS 21 requires that translation differences accumulated in equity be recognised in income when the related foreign entity is sold or liquidated. This is regarded as 'recycling' and is not allowed under AGAAP.

4. Business Combinations

Under AGAAP, a liability for restructuring costs is recognised as at the date of acquisition of an entity or part thereof when there is a demonstrable commitment to a restructuring of the acquired entity and a reliable estimate of the amount of the liability can be made.

The restructuring of Pasminco Limited (Subject to Deed of Company Arrangement) to form the Zinifex Limited Group, would under AGAAP be accounted for as a business combination using purchase accounting (i.e., using fair values).

Under IFRS, IAS 22 'Business Combinations' an acquirer is required to recognise separately at the acquisition date, the acquiree's identifiable assets, liabilities and contingent liabilities that satisfy certain criteria regardless of whether they had been previously recognised in the acquiree's financial statements. A provision for restructuring on acquisition of an entity will not be permitted to be recognised unless the acquiree has, as at the date of acquisition, an existing liability for restructure.

Under IFRS, revisions are being made to IAS 22 and the accounting treatment for transfers of assets between entities subject to common control is to be considered in the next phase of the revision project.

5. Impairment of Assets

Under AGAAP, AASB 1010 'Recoverable Amount of Non-current Assets', only applies to non-current assets. Non-current assets should be reviewed for impairment on an annual basis. The recoverable amount of an asset is the net amount expected to be recovered through the cash inflows and outflows arising from its continued use and subsequent disposal. AGAAP allows the use of undiscounted cash flows and does not prescribe a specific discount rate that should be used. Although AGAAP does not specify whether or not cash flows are to be discounted, the expected net cash flows included in determining recoverable amounts of non-current assets for Zinifex are discounted to their present values using the average interest rate applicable to the group.

Under IFRS impairment testing applies to all assets, whether current or non-current (with some exceptions such as inventory and employee benefits). At every balance sheet date, an entity is required to evaluate whether there is objective evidence that an asset or group of assets is impaired. If this is the case, then an impairment test must be performed. An impairment exists when the carrying amount of an asset exceeds its recoverable amount

which is defined as the higher of its net selling price and its value in use. Value in use is the present value of estimated pre-tax future cash flows arising from its continued use and subsequent disposal determined using a pre-tax discount rate applicable to that asset.

6. Gains and Losses on Disposal of Property, Plant & Equipment

Under AGAAP, revenue on disposal of assets is recorded on a gross basis.

Under IFRS, net gains or losses on disposal of assets are recognised as income or expense for the period.

7. Employee Entitlements

Under AGAAP, AASB 1028 'Accounting for Employee Entitlements' the increase in the present value of an employee benefit obligation arising from the unwinding of a discount is to be recognised as part of the employee benefit expense.

Under IFRS, IAS 19 'Employee Benefits' requires such an unwinding of a discount to be recognised as an interest expense.

8. Provisions

Under AGAAP, where the change in a provision is a consequence of using discounting, AASB 1044 classifies the change in provision on the basis of the nature of the provision.

Under IFRS, IAS 37 treats the change as an interest expense/borrowing cost.

9. Defined Benefit Superannuation Funds/Retirement Benefits

Zinifex's retirement benefit plans include superannuation and retirement benefit plans. The plans provide benefits on retirement, disablement, death, retrenchment or withdrawal from service, the principal types of benefits being lump sum benefits and lump sum accumulation benefits. Under AGAAP, the contributions made to pension plans are charged against income in the period to which they relate. Where the pension plans are defined benefit plans and the plans are in surplus no contribution is required to be made nor charged against income. Further, no asset or liability is recognised in relation to funding surpluses or deficits.

Under IFRS, IAS 19 'Employee Benefits' as it is intended to be adopted in Australia for defined benefits plans, the net asset or deficiency balance on each defined benefit plan is required to be recognised on the balance sheet of the entity. All actuarial gains and losses associated with the defined benefit plans should be immediately recognised in the profit and loss of the entity.

ANNEX D
URS LETTER

28 February 2004

Zinifex Limited ACN 101 657 309
C / - Ferrier Hodgson
Level 25, 140 William Street
Melbourne Victoria 3000

Pasminco Holdings Limited ACN 102 193 395
C / - Ferrier Hodgson
Level 25, 140 William Street
Melbourne Victoria 3000

Objective of our commission

URS Australia Pty Limited ("URS") was commissioned in 2002 to identify material environmental issues at those mining, smelting and refining operations of Pasminco Limited (subject to a Deed of Company Arrangement) ("Pasminco") that will become Zinifex Limited ("Zinifex") and what are proposed to be its controlled entities (Zinifex and its controlled entities are referred to in this letter as the "Zinifex Group"), based on a review process outlined below, and to estimate the current and likely environmental costs associated with rectification or remediation of those issues. During the period September 2002 – December 2003 URS conducted this review and in January 2004 delivered its confidential report in relation to this review (the "Full URS Report").

Purpose of this Letter

The purpose of this letter is to:

- provide you with a summary of the methodology used by URS to identify the material environmental issues at each site covered by the Full URS Report and to estimate the cost to rectify those issues contained in the Full URS Report; and
- to confirm under the heading "Institutional Offering Memorandum" below (based on the work conducted by URS, and subject to the matters set out below) certain disclosures made by Zinifex Limited in the Institutional Offering Memorandum relating to the material environmental issues identified in the Full URS Report.

This letter has no other purpose and does not purport to include all matters, assumptions, estimates and information contained in the Full URS Report. In particular, this letter does not contain or report on or provide confirmations or representations with regard to the cost estimates contained in the Full URS Report, other than as expressly stated.

Below we set out the **Background** to our commission, the **Materiality** guidelines used, the **Methodology** used, the **Limitations** on our scope of work and liability and our beliefs in relation to certain of the environmental disclosures in the **Institutional Offering Memorandum**.

Background

URS is a professional services company providing environmental and engineering expertise to businesses and communities in the Asia Pacific region.

As stated above, URS was commissioned in 2002 to identify material environmental issues at those mining, smelting and refining operations of Pasminco that will become the Zinifex Group, based on a review process outlined below, and to estimate the current and likely environmental costs associated with rectification or remediation of those issues.

URS Australia Pty Ltd (ABN 46 000 691 690)
Level 6, 1 Southbank Boulevarde
Southbank, Victoria 3006 Australia
Tel: 61 3 8699 7500
Fax: 61 3 8699 7550

You should note however that in conducting the work referred to in this letter, and in preparing the estimates of the cost to rectify the material environmental issues contained in the Full URS Report and provided to Pasminco, Pasminco Holdings Limited ("Pasminco Holdings") and the Zinifex Group (collectively referred to as "Zinifex / Pasminco"):

- URS has not provided or obtained any quotations in relation to assessing the cost of specific environmental issues at each site. All estimates are based on URS experience and judgment and on data and advice provided by Zinifex / Pasminco personnel including data gained during site inspection and employee interviews, and all estimates are provided with and subject to a specified level of confidence. Such estimates are not necessarily indicative of actual values or predictive of future results, which may ultimately be substantially more or less favourable than those suggested by the Full URS Report and are therefore due to their statistical nature subject to substantial uncertainty.
- The URS work comprised a review of advice, data, reports and literature provided to it by Zinifex / Pasminco, limited visual observation of surface conditions at the relevant sites and interview(s) with Zinifex / Pasminco personnel. Sampling and laboratory analysis were not undertaken by URS as part of our review.
- URS cannot and has not determined with certainty the amount of the ultimate liability that Zinifex / Pasminco may face with respect to environmental compliance or remedial costs nor their effect on Zinifex / Pasminco future earnings. URS' brief was limited to estimating the likely costs of rectifying or remediating material environmental issues which were identified by URS (as that term "material" is summarised below).
- URS has relied upon the accuracy and completeness of the data and advice provided by Zinifex / Pasminco personnel, information gained during site inspection and employee interviews and other information used by us, without assuming any responsibility for the independent verification of such information or the information and advice regarding Zinifex / Pasminco. URS has further relied upon Zinifex / Pasminco assurances that Zinifex / Pasminco is not aware of any facts or circumstances that would make such information inaccurate or misleading. No indications were found during our investigations that information/advice contained in the Full URS Report as provided to URS was false.
- Any opinions contained herein refer to the actual knowledge of the URS employees who worked on the matters contained in the Full URS Report as of the time of the Full URS Report.
- The information contained in this letter is not a complete description of the analysis and methods applied to the Full URS Report as such analysis and methods involve a complex analytical process involving various determinations as to the most appropriate and relevant methods of analysis and the application of those methods to the particular circumstances and the model referred to below. As the Full URS Report is a confidential document for internal Zinifex / Pasminco use only, the extent of disclosure of the content of the Full URS Report in the Institutional Offering Memorandum has been determined solely by Zinifex / Pasminco management.
- The cost estimates prepared by URS in the Full URS Report and contained in the Institutional Offering Memorandum comprise forward-looking statements and statements of opinion relating to environmental issues, potential environmental costs and other issues based upon limited information. These forward-looking and opinion statements include statements relating to pre-existing and potential environmental conditions at relevant sites. These estimates and the assumptions underlying them are inherently uncertain and are subject to a wide variety of significant business, economic, and competitive risks and uncertainties that could cause actual results to differ materially from those contained in this Institutional Offering Memorandum. Movement in an assumption may offset or compound the effect of a change in any other assumption.

Additional limitations and further details on the limitations referenced above may be found under the heading "Limitations" referred to below.

Materiality

The URS commission required URS to seek to identify and estimate the cost to rectify environmental issues that met or exceeded the materiality thresholds set for purposes of the review by Zinifex / Pasminco. Zinifex / Pasminco management determined and issued the materiality guidelines that applied to our review. URS used a summary of these guidelines that defined a *material* issue as any environmental matter that meets any or all of the following criteria (each use of the word "material" in this letter has the same meaning):

- Is of such a nature and extent that the image, reputation or commercial prospects of the entity (Zinifex / Pasminco) has or could be seriously, significantly and adversely affected
- Is of such a nature and extent that the entity's ability to carry on business in the ordinary course may be seriously affected
- Involves a breach of legislation or duty which could involve significant personal financial liability or imprisonment of company directors or officers
- Is outside the ordinary course of business of the entity
- Relates to an area of critical risk identified for the purposes of an Australian retail prospectus and a US Institutional Offering Memorandum (the "Offer Documents")
- Might reasonably be expected to adversely affect the attitude of a reasonable investor to participate in the offers made under the Offer Documents
- Might adversely affect the future listed status of the entity
- Single or one-off items which, and recurring or similar items which if combined, have an actual or likely cumulative impact in excess of A$5 million.

The URS work also categorised an issue as potentially material if any cost in the range of estimates to rectify exceeded A$5million.

Methodology

The URS review was limited to the then current mining, smelting and refining operations of Pasminco and its controlled entities that will become the Zinifex Group. The URS study comprised a review of data and advice provided to it by Zinifex / Pasminco; conduct of environmental liability workshops with specialist technical personnel; site visits in 2002 and 2003 to all major operations, although these were limited to visual observation of surface conditions and operations; and risk modelling as defined by and agreed with Zinifex / Pasminco management. The URS work was conducted in accordance with the usual care and thoroughness of the environmental consulting profession and was based on generally accepted practices and standards at that time. The Full URS Report summarising the URS work and findings was prepared in January 2004 and is based on the site conditions encountered and data and advice made available to that time.

URS has utilised a risk assessment approach (RISQUE method[1]) to evaluate the material issues that were identified. The RISQUE method adopts a systematic methodology to model environmental costs based on probabilistic techniques.

For each of the *material* issues identified, the following estimates were made:

---

[1] Bowden, A, Lane, M and Martin, J, 2001, *Triple Bottom Line Risk Management – Enhancing Profit, Environmental Performance and Community Benefit*, Wiley, New York.

- The likelihood that the environmental issue would actually occur (expressed as a percentage)
- The timeframe in which the issue could occur (expressed as a range, eg. between Year 5 and Year 10), in some cases based on Zinifex / Pasminco advice as to management intent
- The estimated cost associated with the environmental issue.

These estimates were based on: data and advice received from Zinifex / Pasminco (including as to management intentions, which we have not verified or investigated other than as required by our scope of work); information obtained from workshop participants and site personnel; and on URS experience and judgement.

Likelihood

The likelihood that the material environmental issue would occur was based on a range of factors. For many issues the likelihood is 100%, i.e. it is certain that some expenditure will be required to address the issue. In other instances some uncertainty exists as to whether the issue will occur, and therefore a judgement has been made on the likelihood.

The approach to incorporating likelihood into the model was to simulate the occurrence of each event according to its probability (expressed as a percentage). For example, if an issue was identified as having a 60% likelihood of occurring, its full cost would be added to the total cost in 60% of trial simulations, and would be excluded from the cost estimate in the rest of the trial simulations.

Timeframe

The model also incorporated the estimated timing of potential costs based on certain advice and information from Zinifex / Pasminco as well as other information and URS judgment and experience as outlined above. An example of this would be if a particular cost was considered unlikely to be incurred in the short term, but would be expected to occur at some point in 5-10 years from now. In this case, for each simulation the model would randomly allocate the cost to occur at any time between Year 5 and Year 10, and calculate the net present value of the cost for that year.

In accordance with Zinifex / Pasminco advice, a real NPV discount rate of 8% was used for modelling purposes. Zinifex / Pasminco has confirmed that this rate is a market determined, risk adjusted, after tax, real NPV discount rate commonly used by Zinifex / Pasminco. Beyond this, URS made no independent investigation or verification of this NPV discount rate, nor any sensitivity analysis based on different NPV discount rates, as this was considered beyond the scope of our assignment.

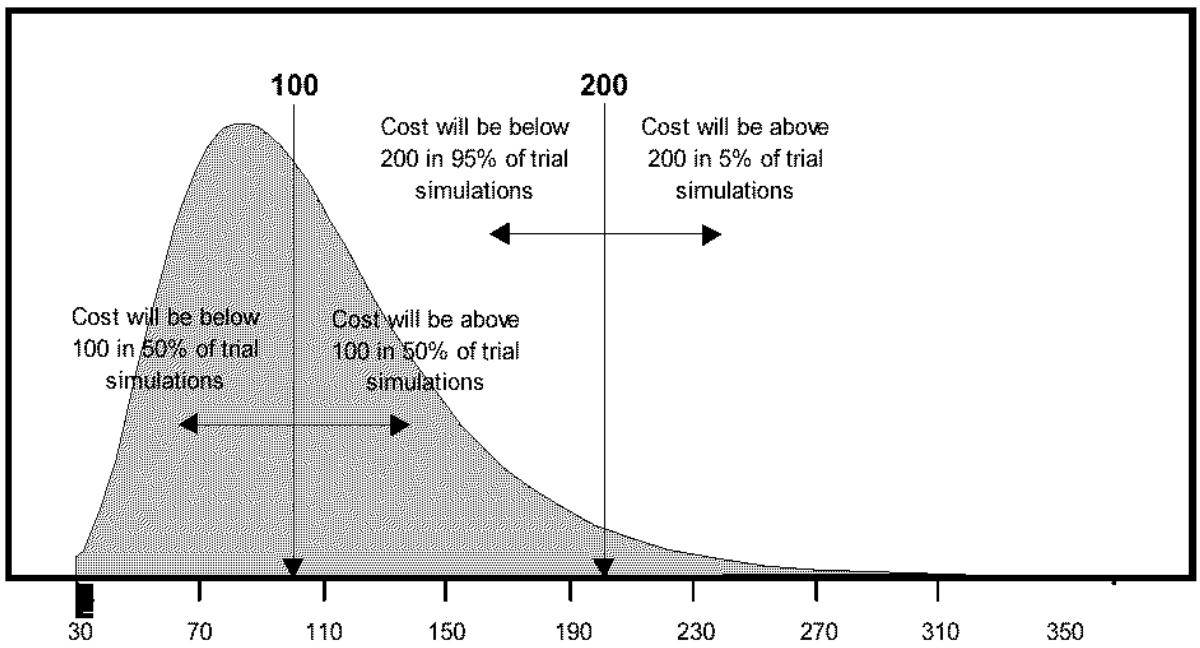
In performing the probabilistic risk assessment, URS adopted a 15 year time frame for review of the operational smelter sites and the nominated mine life for review of the operational mines. Where appropriate, some issues, such as soil and groundwater contamination at smelter sites, were costed over a longer period to reflect the likelihood of ongoing smelter operations beyond the 15 year time frame. URS did not include site closure issues in cost estimates for smelter sites, on the assumption as advised by Zinifex / Pasminco that they will remain as ongoing industrial facilities and because operational approvals do not contain specific closure requirements. However an estimate was made of costs that would be incurred for remediation of soil and groundwater contamination at the smelter sites, which were modelled on the assumption that they would occur in 60 years. If however smelter site closures occur earlier than this time frame, then environmental costs for those sites could be substantially in excess of the estimates contained in the Full URS Report.

Input Cost Estimates

The input cost estimate data for this study varied according to the extent of available information and the degree of uncertainty about a specific environmental issue. For many issues multiple components made up the total cost estimate, for others a single estimate was made. To incorporate the uncertainty associated with cost estimation, each input cost (or component of the input cost) had two values applied to it:

- A **best estimate**, which was judged by the estimating group as the most likely cost. This is also referred to as the 50% confidence level estimate, as there is a 50% chance that the indicated value would be exceeded.
- A **high estimate**, which is a high-end cost, but not the highest conceivable cost. This is also referred to as the 95% confidence level estimate, which would generally be exceeded in only 5% of similar cases.

These estimates were used to create a log-normal probability distribution for the particular cost item (as generally depicted in the following figure). For example, if the best estimate and the high estimate confidence levels provided were \$100 and \$200 respectively, the input cost would be represented as follows.



As shown, the median of the distribution is located at \$100 – that is the best estimate. The high estimate of \$200 is assumed to define the cost estimate associated with the 95th percentile (ie. the value likely to be exceeded only 5% of the time). Notwithstanding this however, the cost could range between the approximate bounds of \$30 and \$350, although in theory it could be higher (as per the log-normal distribution).

The log-normal distribution closely reflects most cost distributions, and is considered appropriate because:

- It includes only positive values
- It is skewed to the right (it has a long tail at the high cost end of the distribution)
- It is a mathematically defined curve with recognisable central tendency (in the general area of the peak)
- Higher, less likely values can be defined by, for example, the 95th percentile value
- The cost theoretically has no upper limit.

This input cost distribution determined the values modelled in the computer simulations. For the example shown above, in each simulation a value generally between \$30 and \$350 would be used. In

50% of simulations, the value would be $100 or less and in 95% of simulations, the value would be $200 or less. There remains a chance however that the actual cost associated with the environmental issue could be substantially more or less than each of these estimated amounts.

In many cases, the estimation of cost for a single issue involved a combination of more than one distribution. For example, if there was uncertainty regarding quantity (eg. volume of sludge) and also uncertainty about the cost per unit quantity (eg. disposal cost per litre of sludge), then the model would multiply values derived from the two distributions to develop an *overall cost distribution.*

URS has not solicited any quotations from any external sources in relation to assessing the cost of specific environmental issues at each site. All cost estimates are provided with a specified level of confidence as referred to above.

The cost estimates prepared by URS were generally estimated in Australian dollars, however some costs were estimated in foreign currencies and converted to Australian dollars at forward exchange rates advised by Zinifex / Pasminco (forward exchange rates for AUD/Euro ranged between 0.5600 and 0.5909, and for AUD/USD between 0.6500 and 0.7000). URS made no independent investigation or verification of these exchange rates, nor any sensitivity analysis based on different exchange rates, as this was considered beyond the scope of our assignment. The cost estimates were also prepared in January 2004 dollars and not escalated to the timeframe in which the issue was estimated to occur (accordingly a real NPV discount rate was used – see "Timeframe" above).

Modelling

The RISQUE method inputs cost estimate log-normal distribution data to a probabilistic spreadsheet computer model, which incorporates Monte Carlo[2] simulation. This type of model was considered appropriate because it has the ability to:

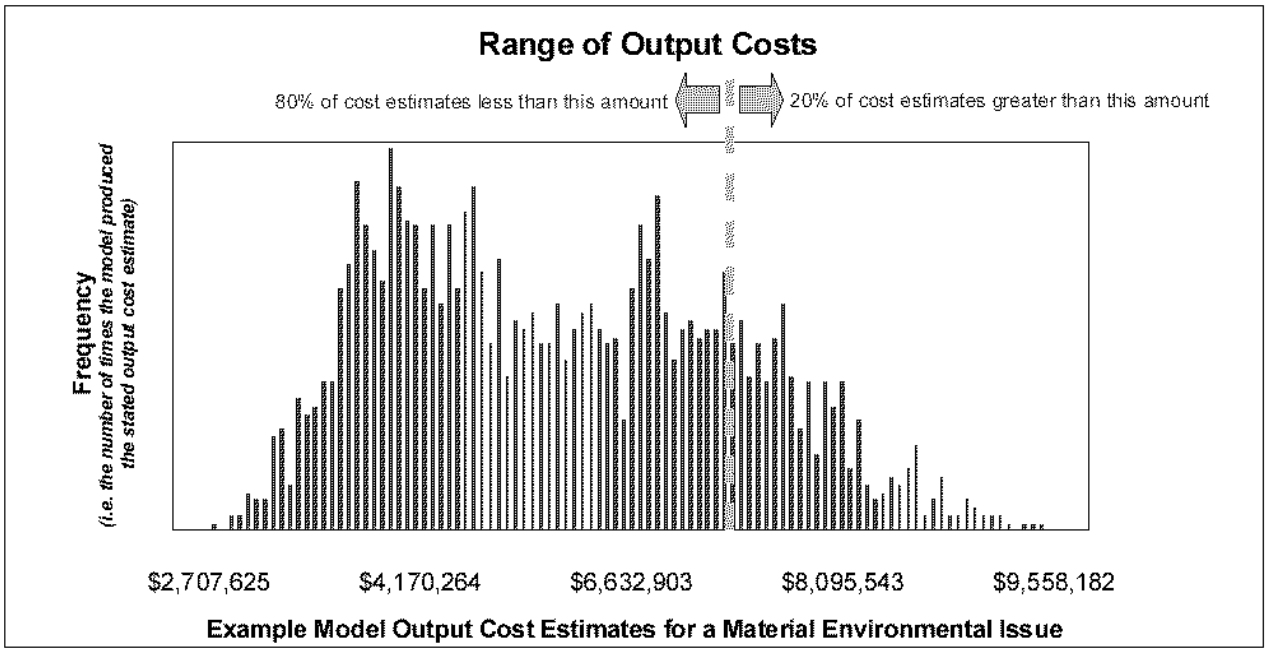
- Handle variables as probability distributions
- Simulate uncertainty of occurrence of issues.

The model was run for a total of 2,000 trial simulations. For each simulation, the input data and processes described above were combined. That is, the components of the cost input data referred to above were combined to produce a total cost estimate for each material environmental issue. As discussed, the input cost estimate would be selected from the probabilistic log-normal distribution for the components making up the costs for that issue and aggregated. The model then:

- Factored in the likelihood of occurrence by including the selected input cost estimate in the stated percentage of simulations
- Calculated net present value according to the time frame allocated for that issue.

The model output NPV cost estimates for each material environmental issue varied according to the range of uncertainties associated with the input components relating to that issue. The output cost estimate distribution for a particular issue could look like the following figure (example only):

[2] Monte Carlo simulation is a statistical tool that uses random numbers to simulate (model) uncertainty.



As well as producing a range of total estimated rectification costs for each material environmental issue, the Monte Carlo simulation carried out by the model produced a range of cost estimates for each site and the overall organisation.

The model also produced the output costs as probability distributions. The 80th percentile (or confidence level) is depicted in the above figure.

The probability distributions could potentially be reported at any confidence level, however, for the purposes of this project each output cost distribution was reported at three confidence levels:

- Optimistic value (50% confidence level, which has a 50% chance of being exceeded)
- Planning value (80% confidence level, which has a 20% chance of being exceeded)
- Pessimistic value (95% confidence level, which has a 5% chance of being exceeded).

URS has found that the planning value is used by many organisations as an estimate of cost for planning purposes, notwithstanding the fact that there is a chance that the actual cost could be substantially more or less.

Limitations

The URS scope of work and the Full URS Report prepared by URS for Pasminco, Pasminco Holdings Limited and Zinifex in accordance with that scope of work, and this letter, are necessarily subject to the following limitations and disclaimers:

- This letter and the Full URS Report were prepared for use of Pasminco, Pasminco Holdings Limited and Zinifex in accordance with the usual care and thoroughness of the environmental consulting profession. It is based on generally accepted practices and standards at the time it was prepared. To the maximum extent permitted by law, and subject to the requirements of the *Corporations Act* 2001, no other warranty, expressed or implied, is made as to the professional advice included in the Full URS Report or this letter. The Full URS Report was prepared in accordance with the agreed scope of work and for the purpose outlined under the heading "Background" above.

- URS does not and cannot represent or warrant that all material environmental issues affecting the relevant Zinifex sites have been identified in the URS Report or the Institutional Offering Memorandum.
- The methodology adopted and sources of information used by URS are detailed in the Full URS Report and summarised above. In particular, in preparing its report, URS has relied on information and advice made available by Zinifex / Pasminco. URS has made no independent verification of this information/advice beyond the agreed scope of works and, to the maximum extent permitted by law and subject to the requirements of the *Corporations Act* 2001, URS assumes no responsibility for any inaccuracies or omissions arising from that information/advice. No indications were found during our investigations that information/advice contained in the Full URS Report as provided to URS was false.
- The Full URS Report was prepared in accordance with and subject to the definition of "materiality" determined and issued by Zinifex / Pasminco management, as summarised above.
- The Full URS Report addresses the likelihood of costs arising from material environmental issues resulting from past and current known uses of the property and the immediately adjacent properties. This investigation was limited to visual observation of surface conditions at the property, interview(s) with personnel and a review of reports and literature. Sampling and laboratory analysis were not undertaken by URS as part of the investigation. Opinions and recommendations contained in this report are based upon data and advice provided by representatives of Zinifex / Pasminco, information gained during site inspection and employee interviews. This approach reflects professional practice at the time of the report. To the maximum extent permitted by law and subject to the requirements of the *Corporations Act* 2001, no warranty or guarantee of property conditions is given or intended.
- The URS investigation addressed the likelihood of hazardous substance contamination resulting from past and current known uses of the subject facility. Given the limited and mutually agreed scope of work, URS does not guarantee that hazardous materials do not exist at the subject properties. Similarly, a property which appears to be unaffected by hazardous materials at the time of our assessment may later, due to natural phenomena or human intervention, become contaminated. To the maximum extent permitted by law and subject to the requirements of the *Corporations Act* 2001, URS cannot be responsible for changes in conditions that occur after the date of the Full URS Report, whether they are hazardous or otherwise.
- Opinions and recommendations presented in the Full URS Report and in this letter apply to the sites existing at the time of our investigation and necessarily cannot apply to site changes of which URS is not aware and has not had the opportunity to evaluate. To the maximum extent permitted by law and subject to the requirements of the *Corporations Act* 2001, URS disclaims responsibility for any changes that may have occurred after this time.
- Any estimates contained in the Full URS Report have been based on URS experience and judgement and on data and advice provided by Zinifex / Pasminco personnel. In no case has a quotation been obtained for rectification of issues. The estimates that have been provided may therefore vary from actual costs at the time of expenditure, potentially substantially. All estimates are provided with a specified level of confidence.
- The confidence level considered to be most appropriate for planning purposes will vary depending on the conservatism of the user and the nature of the project. The user should therefore select appropriate confidence levels to suit their own particular risk profile.
- The level of costs to be incurred by the Zinifex Group in respect of environmental issues will be dependent upon various factors. These include, among other things, the nature and extent of the current and future environmental laws and regulations, enforcement activities by regulators, the timing and nature of any required remedial work, the extent of any contamination, the technology

available to meet the required standards, management decisions as to dealing with issues, the determination of Zinifex Group liability in proportion to that of other parties and the extent to which any costs are recoverable from insurance and third parties. URS has made estimates of likely Zinifex Group costs based on various assumptions and Zinifex / Pasminco advice regarding these matters. Obviously, any change in these parameters could have a significant effect on our estimates.

- In light of the difficulty of predicting the level of future environmental costs, URS cannot and has not determined with certainty the amount of the ultimate Zinifex Group liability with respect to environmental compliance or remedial costs nor their effect on Zinifex Group earnings in future reporting periods.
- This letter does not seek to summarise the Full URS Report but only to address the matters stated under "Purpose of this Letter" on page 1. Of necessity this means that certain elements of the Full URS Report are not included in this letter, and these matters may be relevant to a more detailed understanding of the URS work and findings (which is beyond the purpose of this letter as set out above). As the Full URS Report is a confidential document for internal Zinifex / Pasminco use only, the extent of disclosure of the content of the Full URS Report in the Institutional Offering Memorandum has been determined solely by Zinifex / Pasminco management.
- This letter should be read in full. To the maximum extent permitted by law and subject to the requirements of the *Corporations Act* 2001, no responsibility is accepted for use of any part of this letter in any other context or for any other purpose not stated therein. This letter does not purport to give legal advice. Legal advice can only be given by qualified legal practitioners.
- Neither the Full URS Report nor the modelling of cost estimates summarised in this letter addresses any tax related issues (including any tax impact on the real NPV discount rate used as part of the methodology referred to above). Tax advice is beyond the scope of the URS commission.
- Neither the Full URS Report nor this letter constitutes financial advice or a recommendation or an offer to buy or sell securities in any jurisdiction.
- Neither the Full URS Report nor this letter gives nor should be interpreted as giving an opinion or advice on a financial product within the meaning of section 766B of the *Corporations Act* 2001 or section 12BAB of the *Australian Securities and Investment Commission Act* 2001. Neither the Full URS Report nor this letter are intended to influence the reader in making a decision in relation to the financial product offered under the Institutional Offering Memorandum. Financial product advice can only be given by advisors holding an Australian Financial Services Licence. URS is not operating under an Australian Financial Services Licence in providing the Full URS Report or this letter. In accordance with regulation 7.6.01(u) of the *Corporations Regulations* 2001, URS makes the following disclosures:
    - URS was retained by Pasminco and related companies to provide the Full URS Report as referred to above. Under the terms of that retainer URS received fees not exceeding A$500,000 and the benefit of other contractual terms (including indemnities in favour of URS and an agreed limitation of URS liability)
    - URS has previously been engaged by former Pasminco operations and anticipates that further engagements in relation to the provision of environmental consultancy advice may be entered into with Pasminco and its controlled entities, and the Zinifex Group, on an as required basis
    - URS does not make any direct investment in any member of the Pasminco and Zinifex Groups or their business interests and has no commercial interests in the financial products being offered other than as a service provider to the Pasminco and Zinifex Groups.

- Drafts of each of the Full URS Report and this letter have been provided to Zinifex / Pasminco and their advisors for review and comment.

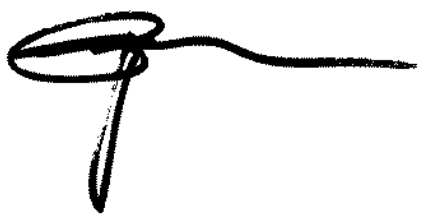
Institutional Offering Memorandum

URS has reviewed the environmental disclosures contained in the Institutional Offering Memorandum. Based on the work it has undertaken in connection with its engagement, but subject to the matters set out above, URS believes that:

- The environmental issues referred to in the section of this Institutional Offering Memorandum titled 'Environmental Management – Material Environmental Issues' (in the 'Business' section) in respect of each of the Zinifex Group operations at Century, Rosebery Mine, Hobart Smelter, Budel, Port Pirie and Clarksville refers to each of the material environmental issues (as the term "material" is described above) which has been identified by URS in the Full URS Report as material. This does not however mean that other material environmental issues do not or will not affect each such site.
- The cost estimate for each material environmental issue listed in the column titled "Total (a)" in the table contained in Note 12 to the Pro Forma Statement of Financial Position included in this Institutional Offering Memorandum are the NPV cost estimates for that material environmental issue identified by URS (where those NPV cost estimates exceeded zero) and included in the Full URS Report at an 80% confidence level, which estimates have been calculated in accordance with the methodology set out above and are subject to the limitations and qualifications set out above. The arithmetic subtotals and overall total are not URS estimated totals. As stated above, you are reminded that there is a chance (estimated at 20%) that these estimates could be exceeded and potentially by a substantial amount. URS expresses no opinion on, has not investigated nor verified and takes no responsibility for the treatment of those cost estimates by Zinifex / Pasminco, in the Pro Forma Statement of Financial Position or otherwise.

Yours faithfully

URS Australia Pty Ltd



ANNEX E
INDEPENDENT TECHNICAL REVIEW REPORT

AMC Consultants Pty Ltd
ABN 58 008 129 164

Level 19, 114 William Street
MELBOURNE VIC 3000

Telephone +61 3 9670 8455
Facsimile +61 3 9670 8311
amcmelb@amcconsultants.com.au

29 February 2004

The Directors
Pasminco Holdings Limited
c/- Ferrier Hodgson
Level 25, 140 William Street
MELBOURNE VIC 3000

The Directors
Zinifex Limited
380 St Kilda Road
MELBOURNE VIC 3000

Dear Sirs

INDEPENDENT TECHNICAL REVIEW REPORT

The attached report concerns the mining and smelting assets of Zinifex Limited ACN 101 657 309 ("Zinifex") acquired from Pasminco Limited (Subject to Deed of Company Arrangement) ACN 004 368 674 ("Pasminco"). It has been prepared for inclusion in an institutional offering memorandum ("IOM") and incorporated by reference in accordance with Section 712 of the Corporation Act into a retail prospectus ("Prospectus"), each of which is proposed to be issued by Pasminco Holdings Limited ACN 102 193 195 and Zinifex on or about 1 March 2004.

This report has been prepared independently and in accordance with the Code and Guidelines for Technical Assessment and/or Valuation of Mineral and Petroleum Assets and Mineral and Petroleum Securities for Independent Expert Reports as adopted and issued by the Australasian Institute of Mining and Metallurgy ("AusIMM") in June 1998 (the "Valmin Code"). The Code includes the requirement that statements of Mineral Resources and Ore Reserves be classified and reported in accordance with the Australasian Code for Reporting of Mineral Resources and Ore Reserves, 1999 (the "JORC Code"). AMC Consultants Pty Ltd ACN 008 129 164 ("AMC") is satisfied that all such statements in this report are in accordance with the JORC Code, except where specifically noted.

AMC prepared a draft independent technical review report in February 2003 for the mining and smelting assets then owned by Pasminco and its controlled entities. In its due diligence for the preparation of that report, its consultants visited each of the material mining and smelting operations in Australia and overseas, held discussions with site and head office management staff and reviewed all material records and documents provided to it by Pasminco. In updating that report for the relevant assets acquired by Zinifex, AMC consultants have again visited each of the material mining and smelting operations, held further discussions with management and reviewed material information relevant to the last twelve months.

AMC's review does not constitute an audit but was aimed to develop an adequate understanding of each material functional area of each asset, its recent performance, the plans for future

operation and the key issues and risks relevant to that future operation. The review examined the material inputs to resources and reserves and to production and costs at each operation and from this, AMC aimed to satisfy itself that present estimates and future projections are in accordance with proper industry practice and are consistent both with recent performance and reasonable assessed outcomes from planned developments.

AMC's due diligence did not include a review of commercial terms, market outlook and prices for the various commodities and products produced by Zinifex, nor terms of freight from mine site to smelter or treatment and refining charges. In accordance with the terms of its engagement, AMC has not carried out a review of environmental issues for each of the assets in its report. It has not reviewed insurances relating to operations, nor issues of taxation or state or third party royalty. Industrial relations issues are reviewed elsewhere.

Power costs are a significant input to overall operating costs, particularly of smelters. Diesel fuel is a significant input to mining costs. AMC has accepted the projected commodities costs provided to it by Zinifex and not separately reviewed them, except where noted.

The status of Zinifex's material mining tenements has been reviewed by Minter Ellison. AMC considers that the summary of relevant conclusions from that review included in Section 2 of this report appropriately addresses the Valmin Code requirement that the status of tenements has been disclosed and that disclosure is based on recent independent inquiry by a suitably qualified party AMC has not separately reported on the tenements but understands there are no material tenement issues jeopardising title to any material asset. We have not reviewed legal agreements pertaining to ownership or operation of Zinifex's assets except as to their impact on the stated objectives of this review.

AMC has considered its findings relative to two Zinifex forecasting models, one which covers the two years ending 30 June 2004 and 30 June 2005 ("the "Two Year Forecast") and is the basis for Zinifex's financial forecasts elsewhere in this IOM, and the other which is a life of asset Long Term Plan whose longer term inputs are necessarily subject to variation with future developments. Where possible, AMC has reported forecasts for the period to 30 June 2005 in accordance with the former model but as it is primarily a financial model, some of the inputs reported by AMC have necessarily had to be extracted from the Long Term Plan. We note that there are minor inconsistencies in some of the past and projected physical and cost data between this report and other parts of the IOM. These inconsistencies arise from the sourcing of the information and, in our opinion, are not material.

AMC has aimed to review and satisfy itself that the cost and production inputs to the Long Term Plan are based on industry acceptable data, which is consistent with recent operating performance and reasonable planned developments. AMC has found that costs and production parameters in the Long Term Plan are materially consistent with its due diligence and it is of the opinion that the two models are materially consistent. AMC's assessment of these models and plans has not included physicals or costs of an environmental nature as these were separately reviewed by another consultant, URS Australia ("URS"). URS has carried out a probabilistic assessment of financial liabilities of an environmental nature and amounts reflecting these liabilities have been included in the Long Term Plan.

This report is effective at the date of writing and is based on operating information to 31 December 2003. All monetary amounts included in the report are in early 2004 Australian dollars except where otherwise specified. Zinifex operations report in financial years ending 30 June, and within this report, unless otherwise stated, data presented for a particular year refers to 12 months ending 30 June in that year. Various abbreviations and acronyms are used through the report and these are defined in the Technical Glossary, which is appended.

The report should be read in conjunction with the "Business" section that is included elsewhere in this IOM.

Our conclusions are appropriate at the date of this report but could alter over time in light of new technical information and changed economic conditions.

The report has the following structure:

- Introduction and Economic Framework which discusses the relationship between Zinifex's mines and smelters and some of the key issues relevant to their economics.
- A general introduction to Zinifex's mines followed by individual reports on each of Century mine and Rosebery mine and a brief report on the Dugald River exploration project.
- A general introduction to Zinifex's smelting assets including discussion of different smelting technologies followed by a description of individual smelters at Hobart, Port Pirie, Budel and Clarksville.
- Sources of information for AMC's report with a summary of material references in Appendix A.
- Qualifications and Limitations applicable to the report and the contributors to it, the latter listed in Appendix B.
- Technical Glossary attached as Appendix C.

Different parts of the report have been prepared by different consultants. As much as reasonably possible, structure and format have been standardised but there are some differences of style.

G R Appleyard
BSc (Hons), BA, FAusIMM (CP), MCIM
Director

P L McCarthy
MGeosc, BSc (Eng), FAusIMM (CP), MIEAust (CP), MAIME
Managing Director

1 INTRODUCTION AND ECONOMIC FRAMEWORK

1.1 Introduction

Zinifex will acquire and operate some of the assets previously owned by the Pasminco Group.

The Pasminco Group was formed in 1988 when the zinc-lead-silver mining, smelting and international marketing activities of CRA Ltd and North Broken Hill Peko Ltd were merged. In 1993, Pasminco's UK zinc processing operations were sold, but in 1995, Pasminco acquired the second half of the Budel smelter from Billiton BV. In 1997, Pasminco bought the Century and Dugald River zinc deposits from CRA Ltd. In 1998, Pasminco acquired Savage Resources Ltd and through that acquisition, its USA mining and smelting operations.

Since Pasminco was placed in administration in September 2001, it has sold or closed various operations. After purchasing assets from Pasminco, Zinifex will own and operate two zinc-lead-silver mines in Australia, four zinc and lead smelters in Australia, Netherlands and the USA, and exploration projects in Australia, including Dugald River.

When Pasminco was in administration, there was a progressive overview of all of its operations and strategies aimed at enhancing value. Business improvement programs were implemented and operating and capital cost expenditures were tightly controlled. Regional exploration was reduced to a level sufficient only to maintain existing tenements.

1.2 Group production

Recent production statistics for each of the Zinifex mines and smelters are included in this report.

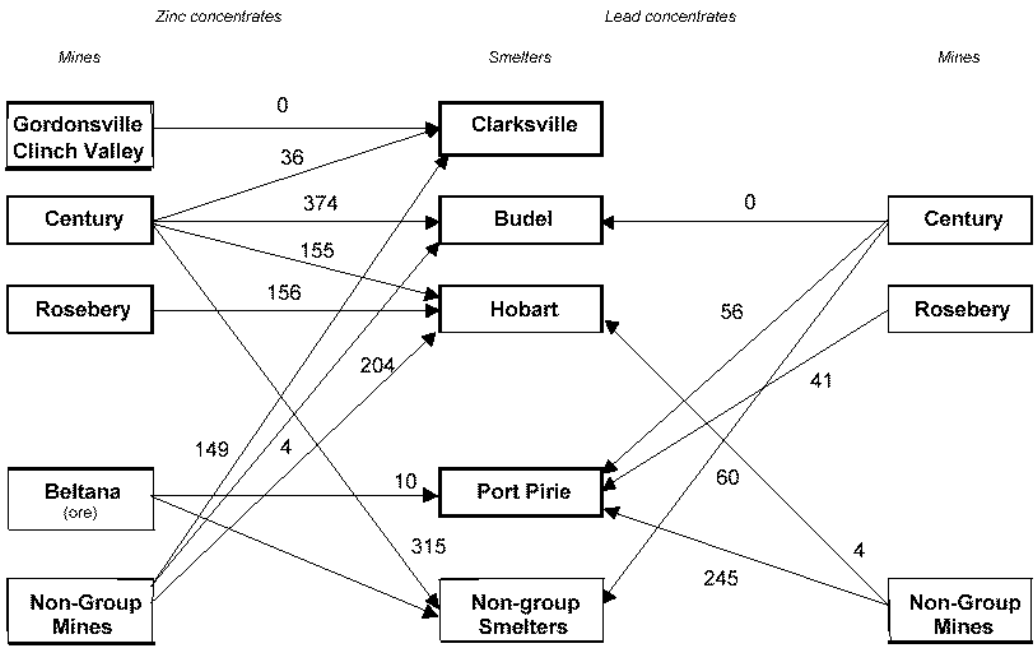
Figure 1 summarises the present relationships between the various mines and smelters. For zinc, Zinifex mine production now equates to around 70% of its smelter capacity. However for lead, mining capacity represents only around 40% of smelting capacity and this necessitates long-term procurement of lead concentrates.

Because of the mine and smelter sales and closures referred to above, the balance between supply and demand for concentrates within the group has undergone significant change over the past two years. This has had substantial implications both for the economics of the Zinifex operations and for the planning of technical developments in its smelters. In the remainder of this introduction, issues relevant to the inter-relationship of the mines and smelters and their economic performance are discussed.

Each of the mines and smelters is treated to a large extent as an independent business entity, paying and charging normal industry prices for concentrates and other feed materials received or transferred from other group business entities.

Figure 1 Zinifex Group Concentrate Flows Forecast for 2005

000 dry metric tonnes



1.3 The pricing of concentrates

'Concentrate terms' effectively provide a price that smelters pay for concentrates received from a mine at the smelter's port or receival area. Concentrate terms, usually defined in US dollars, comprise:

- payment for an agreed part of the value of contained metals at prices prevailing during an agreed "quotational period"; less
- negotiated treatment charges ("TCs") per tonne of concentrate; less
- agreed refining charges ("RCs") levied on payable amounts of defined metals; less
- any penalties applied against agreed concentrate specifications.

Mines are usually paid only for those metals that the purchasing smelter can recover economically. Thus, lead, copper and gold are not payable by electrolytic zinc smelters such as Hobart, Budel and Clarksville. However, silver is payable by these smelters regardless of whether they can recover that metal. In other smelters, such as Port Pirie, a percentage of several contained minor metal values may be paid after deduction of an agreed amount, since it has an ability to recover parts of those metals.

TCs can be negotiated annually within a longer-term supply contract or 'frame contract' or on a short-term 'spot' basis. Currently TCs for zinc and lead concentrates in frame contracts are typically US$150/t and US$120/t respectively. Those charges may be escalated or de-escalated according to variation in the primary metal price so that the acquiring smelter shares some of the metal price potential and risk.

RCs in zinc and lead smelting and refining are generally only applied to payable copper and precious metals in the concentrate. The costs of refining zinc and lead are deemed to be included within the relevant TCs.

Penalties can be deducted by the smelter for any out-of-specification grades of deleterious elements such as arsenic and mercury, and/or gangue minerals such as iron and silica.

1.4 Comparative economics of the Zinifex mines and smelters

Tables 1 and 2 illustrate the economic performance of the Zinifex mines and smelters by cash-based value-chain analysis. Each table shows the average actual results for the two most recent financial years 2002 and 2003 and the average projected results for the next two financial years 2004 and 2005 as forecast by Zinifex in its Long Term Plan.

In these tables, production figures have been rounded to the nearest thousand tonnes, while monetary figures have been rounded to whole numbers. Actual and forecast metal prices, exchange rates, TCs and RCs have been provided by Zinifex and are shown in Table 3.

Factors characterising the economics of the individual mines and smelters are discussed in the two following sections.

1.5 Mining economics

Table 1 illustrates the actual and projected economic performance in cash terms of the two Zinifex mines over the selected four-year period. The table is structured to illustrate the value of mined ore and costs and losses experienced by the mining entity as the ore is first concentrated, and later as the concentrate is smelted. It can be seen that there is considerable variation in costs in both categories of value loss.

Century is a modern open pit mine based on a large resource with ore which is of medium grade and is metallurgically complex. Around 19% of the value of its ore is lost in concentration. On the other hand, Rosebery is an older, underground mine based on a largely depleted resource of high-grade polymetallic mineralisation with generally good metallurgical recoveries. Only about 10% of the higher inherent value of its ore is lost in concentration.

Offsite costs include concentrate freight charges but, of greater magnitude, concentrate terms. For most mines, the cost of applying concentrate terms to the ex-mine product exceeds the mining and milling cost incurred at the operating site.

Rosebery is advantaged by its ability to produce high-grade concentrates and to recover much of its gold content as dorè bullion. As a consequence, Rosebery is paid around 58% of the value in

its ex-mine products by smelters. Century's lower-grade concentrates yield only around 50% of their ex-mine product value.

Table 1 Cash Value-Chain Analysis - Zinifex mines for the four financial years 2002 to 2005

Statistic	Unit	Century			Rosebery		
		Ave actual 2002 +2003	Forecast 2004	Forecast 2005	*Ave actual 2002 + 2003*	Forecast 2004	Forecast 2005
Ore milling rate	000tpa	*5022*	5382	5336	*781*	787	764
Zinc production in concentrate[4]	000tpa	*501*	503	514	*80*	85	90
Lead production in concentrate[4]	000tpa	*70*	91	80	*25*	28	26
Contained metal value in ore	$/t ore	*210*	198	205	*263*	274	290
Loss in concentrate production[1]	$/t ore	*(53)*	(42)	(40)	*(60)*	(34)	(29)
Loss in concentrate smelting[2]	$/t ore	*(84)*	(75)	(83)	*(92)*	(93)	(114)
Net metal value achieved by the mine	**$/t ore**	***73***	**80**	**82**	***110***	**146**	**147**
Mining, milling, admin cost at mine-site[3]	$/t ore	*(57)*	(56)	(60)	*(89)*	(67)	(76)
Concentrate handling costs	$/t ore	*(11)*	(10)	(11)			
Group office charges and royalties	$/t ore	*(3)*	(3)	(3)	*(9)*	(10)	(9)
Total costs attributable to the mine	**$/t ore**	***(71)***	**(69)**	**(74)**	***(98)***	77	**85**
Net pre-tax value attributable to mine	**$/t ore**	***2***	**12**	**8**	***13***	**69**	**62**
Working capital movements	$/t ore		2				6
Capital reinvestment requirements	$/t ore	*(3)*	(9)	(5)	*(28)*	(20)	(38)

Notes:
1. "Loss in concentrate production" refers to the value of metal recovery losses in the concentration process.
2. "Loss in concentrate smelting" refers to the value of treatment and refining charges, deductions and penalties applied by the smelter.
3. Excludes mine development costs in contrast to Table 17.
4. For Rosebery, includes all concentrates produced.

In addition to the onsite and offsite costs discussed above, capital re-investment is required to sustain each mining operation. The required level of re-investment varies according to the age of the equipment; desired modifications to production or technical specifications; the need for new facilities such as tailings dam extensions; and the need for further mine development. It can be seen in Table 1 that capital cost per tonne for Rosebery is considerably higher than for Century, partly reflecting the smaller scale of operations

Other factors affecting the economics of any base metal mine include requirements for working capital. To the extent that some mines are in remote locations, they require a high level of self-sufficiency and can suffer extended delays in payment for product. Concentrate is usually not paid for until three or four months after the mine has incurred the on site production costs. Analysis of working capital requirements lies outside the scope of AMC's assessment.

1.6 Smelting economics

Table 2 compares the actual and projected cash performance of the four Zinifex smelters over the selected period of four financial years. Economic performance varies considerably, with key

determinants including the inherent efficiency and flexibility of the smelting technology employed.

Smelting technology is discussed in relation to the Zinifex smelters in Sections 6 to 10 of this report. The applied smelting technology influences feedstock flexibility, operating efficiency, and production costs, both for the acquisition of the raw material feedstock (mainly concentrates) and for their conversion to metal.

Some sections of the Australian Zinifex smelters are relatively old, but much has been renewed. In particular, the installed neutralisation process and the electrolysis technology economically disadvantage Hobart, but the roasters and acid plants are relatively new. Port Pirie has operated for a long time but has been largely renewed and is both economically competitive and flexible in regard to the range of feeds it can handle which includes Hobart's neutralisation product.

Budel and Clarksville are more modern, but the terms of their environmental permits make them less flexible in regard to the range of concentrate feeds that they can handle. Budel depends on low-iron concentrates and is currently largely restricted to Century feed. Clarksville was designed for the largely depleted Mississippi Valley type concentrates and is experiencing some diminution in zinc recovery as it adjusts to conventionally traded concentrates.

A very important economic efficiency factor for any smelter is its ability to recover more metal (primary and minor) than it pays for through concentrate terms ("free metal"). Free metal margins are particularly beneficial to Port Pirie, where all of the zinc production, 7% of lead production and around 25% of minor metal (silver, gold and copper) production value comes from free metal (Table 2).

Zinifex's three electrolytic smelters recover 6.4% to 13.5% of zinc as free metal. Budel gains a particular advantage from its higher recovery efficiency deriving mainly from its reliance on Century concentrates. Hobart will make substantial free zinc metal gains with increases in Century feedstock. On the other hand, none of the electrolytic smelters recovers silver for which they pay through concentrate terms.

Minor metal production can be important to smelter economics. For Port Pirie, the value of silver, copper and gold metal sales from the lead smelter represents around 40% of total lead circuit production value.

Additionally, non-metallic by-products such as sulphuric acid, gypsum and copper sulphate can generate additional revenue at periods during the economic cycle. At other times these unavoidable by-products can become an economic burden.

Smelter location has a major influence over the operating costs paid and actual prices received by any smelter for its metals (as a margin over or under LME price) and its sulphuric acid by-product. Relative to smelters in major overseas market areas, the Australian Zinifex smelters tend to be disadvantaged by their distance from centres of metal consumption but are advantaged by their proximity to the Zinifex mines and by lower electricity and labour costs than the offshore smelters.

Working capital requirements can be of particular importance to smelters, especially the necessary stockholding of raw materials and finished product in warehouses or in transit; this factor being determined largely by the proximity of the smelter to its suppliers and customers. Budel and Clarksville are located close to centres of industrial consumption into which they can deliver market metal on a daily basis, thus minimising the stock of finished product in warehouse or in transit to consumers. The current smelter off-take contract with Trafigura BV effectively eliminates the relative disadvantage previously suffered by the more distant Hobart and Port Pirie smelters, which needed to ship metals through Asian warehouses.

All of the Zinifex smelters require substantial annual re-investment of capital as shown in Table 2. Factors relevant to re-investment requirements include the age of the smelters and the need to meet evolving environmental regulation and community standards.

Table 2 Cash Value-Chain Analysis - Zinifex smelters for the four financial years 2002 to 2005

		Hobart			Budel			Clarksville			Port Pirie					
		Ave actual	Forecast		*Ave actual*	Forecast		*Ave actual*	Forecast		*Ave actual*	Forecast		*Ave actual*	Forecast	
Statistic	**Unit**	2002+2003	2004	2005	2002+2003	2004	2005	2002+2003	2004	2005	2002+2003	2004	2005	2002+2003	2004	2005
Primary metal		Zinc			Zinc			Zinc			Zinc			Lead		
Production of primary metal																
Overall recovery of primary metal	%	*91*	90.6	91.7	*98.3*	98.5	98.5	*96.2*	93.7	93.7	*88.7*	88.7	88.4	*98.7*	99.9	99.9
Recovery margin over concentrate terms	%		5.8	7		13.5	13.5		9.3	9.3		88.7	88.4		6.5	7.7
Primary metal production rate	000tpa	*254*	257	258	*203*	226	232	*116*	108	116	*42*	41	41	*271*	245	226
Primary metal paid for in concentrates	000tpa		241	238		195	200		97	104					229	209
Free primary metal [1]	000tpa		16	20		31	32		11	12		41	41		16	17
Annual free metals recovery [3]																
Zinc	$ Mpa		22	28		41	45		14	16		54	59			
Lead	$ Mpa														14	16
Silver	$ Mpa		-4	-3		-3	-4		-1	-1					11	11
Other	$ Mpa					2	2		1	1					18	16
Total free-metal gains [1]	$ Mpa		18	26		41	44		14	17		54	59		42	43
Effective value of primary metal production																
Base metal price: A$ terms	$/t	*1415*	1321	1421	*1415*	1321	1421	*1415*	1321	1421	*1415*	1321	1421	*828*	887	910
Plus net sales margin on primary metal [2]	$/t		54	85		123	115		75	81		53	42		1	23
Plus silver, gold, copper revenue	$/t		2	2		46	20		9	9					443	459
Plus non-metallic by-products revenue	$/t		63	60		46	42		66	39					13	13
Effective value zinc & lead production [3]	$/t	*1525*	1440	1568	*1686*	1535	1597	*1619*	1472	1549	*1316*	1383	1463	*1321*	1344	1405
Direct production costs per unit of primary metal production																
Raw materials cost	$/t	*-836*	-898	-962	*-881*	-881	-911	*-861*	-834	-926	*-75*	-72	-86	*-936*	-921	-919
Conversion cost	$/t	*-468*	-473	-480	*-617*	-497	-546	*-768*	-613	-533	*-1086*	-1201	-1140	*-334*	-342	-352
Group Office charges and other	$/t	*-30*	-33	-33	*-49*	-24	-25	*-49*			*-28*	-34	-42	*-24*	-34	-42
Net pre-tax value for smelter	$/t	*197*	35	93	*138*	133	114	*-59*	26	91	*127*	46	195	*27*	47	92
Working capital movements	$/t		127	78		-22	48		-4	42		39	40		78	-26
Reinvestment requirements	$/t	*-65*	-74	-121	*-48*	-77	-103	*-29*	-36	-28	*-159*	-70	-156	*-58*	-52	-110

Notes:

1. "Free metal" for a smelter is the metal recovered by processing that is not paid for under concentrate terms.
2. "Sales margin" for a smelter is the margin between the actual price received for metal and the LME metal price on the same day. "Net sales margin" is after subtraction of freight, warehousing and other realisation costs.
3. Actual 2002 + 2003 figure for additional revenue not available.

Table 3 Metal prices and exchange rates experienced by Pasminco in 2002 and 2003 and real terms forecasts by Zinifex for 2004 and 2005

Item	Unit	Actual years		Projected years	
		2001-2002	2002-2003	2003-2004	2004-2005
Metal prices					
Zinc	US$/t	*792*	*775*	968	1108
Lead	US$/t	*474*	*445*	650	710
Silver	US$/t	*4.44*	*4.61*	6.00	5.88
Copper	US$/t	*1514*	*1593*	1900	1900
Gold	US$/t	*289*	*333*	370	340
Exchange rates					
A$/US$	A$	*0.52*	*0.59*	0.73	0.78
A$/Euro	A$	*0.59*	*0.56*	0.63	0.60

2 MINING OPERATIONS

Zinifex's two mines, Century in Queensland and Rosebery in Tasmania, and its Dugald River zinc-lead project in Queensland are reviewed in the sections that follow. The Beltana mine in northern South Australia, which provides a small tonnage of zinc silicate ore to Port Pirie and has been mined under contract, is not reviewed as it is not a material asset. No further mining is planned and the existing stockpile will be gradually drawn down to 2006.

Mineral Resources and Ore Reserves for the two mines are estimates as at 31 March 2003. For Century the estimates used prices of US$800 per tonne, US$495 per tonne and US$5 per ounce for zinc, lead and silver respectively at an exchange rate of A$=US$0.57.

For Rosebery, similar but not exactly the same prices were used for estimation of reserves to be mined in the short term, together with prices of US$1,910 per tonne and US$300 per ounce for copper and gold respectively with an exchange rate of A$=US$0.58. However for most of the reserve a different price and different exchange rate was used such that the Australian dollar zinc price was about 25% higher while lead, silver and copper prices were lower. AMC thinks that, because of the distribution of ore grade mineralisation at Rosebery, the reserve is not greatly sensitive to metal price variation.

Each of the reports that follow addresses AMC's analysis of the key issues pertinent to resource and reserve estimating procedures, the mining operations and the processing operations while also providing comment on infrastructural matters and management. The reports address recent and projected performance, both in physical terms and in costs, and aim to highlight the main issues relevant to the future performance of each operation.

Minter Ellison provided AMC with copies of its reports relating to Mining Rights at Century, Rosebery, Dugald River and Port Pirie. In each case it stated that the main mining titles were current at the time of the searches, December 2003, and that, based on the material it had reviewed, it had not identified any material issues, which in AMC's understanding, were relevant to material mining titles. On behalf of Zinifex it has been confirmed in writing that to the best of

its knowledge, there has been no material change in the status of those material tenements since December 2003.

3 CENTURY MINE

3.1 Introduction

The Century Mine is approximately 250 km north-north west of Mt Isa in north-west Queensland (Figure 2). Operations commenced in March 2000. Mining has reached design capacity and substantial progress has been made in the process plant towards achieving designed metallurgical performance.

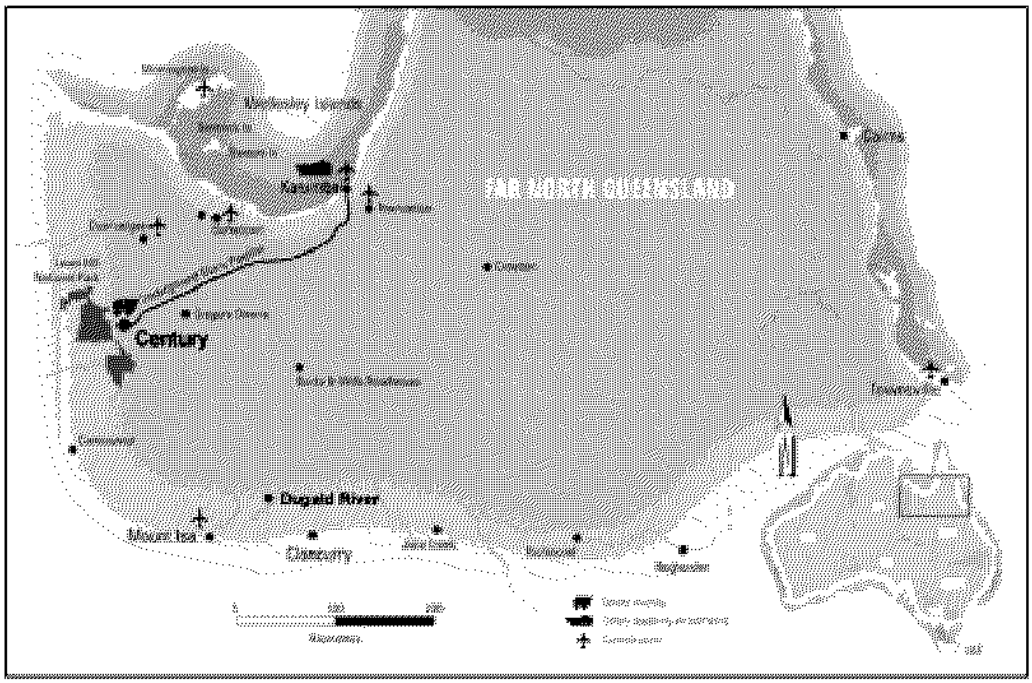
The design capacity was over 500,000 tpa of zinc in concentrate, mining 4.5 Mtpa to 5.5 Mtpa of ore with a diluted life-of-mine head grade of 11.5% to 13.5% zinc.

The Century mining complex comprises:

- The Lawn Hill open cut mine and concentrator;
- A pipeline for the transport of concentrate slurry to a port at Karumba, on the Gulf of Carpentaria; and
- The Karumba port facility where the concentrate is dried and loaded by transfer vessel into ocean going bulk carriers.

Whilst the bulk of ex-mine revenue is attributable to zinc, lead and silver also generate significant revenue.

Figure 2 Location Map of Century and Dugald River



3.2 Geology, Mineral Resources, Ore Reserves and Potential for Additions

3.2.1 Geology

The Century deposit is hosted by mid-Proterozoic rocks of the Mount Isa Inlier, which along with the adjacent McArthur Basin, hosts major zinc-lead-silver deposits at Mount Isa, Hilton, George Fisher, Cannington, Dugald River, Lady Loretta, Century and McArthur River. The mineralisation occurs within an 850m thick sequence of siltstone, shale, carbonaceous shale and sandstone which is unconformably overlain by Cambrian limestone.

The deposit has an aerial extent of about 1,200m east-west and 1,400m north-south and is closed off in all directions either by the unconformity or by faulting. The mineralised stratigraphy lies in the core of a gently folded syncline and is dislocated by a series of north-west and north-east trending faults that can have a significant impact on the local distribution of mineralisation. The mineralisation dips at between 5° and 25° over most of the area steepening to 70° at the margins. Discordant irregular intrusive bodies of carbonate breccia occur along pre-existing fractures. In the eastern up-dip part of the deposit, in unconformable contact with limestone, there is a zone of alteration characterised by the presence of hematite (the "hematite line") within which ore grade mineralisation can have been leached out.

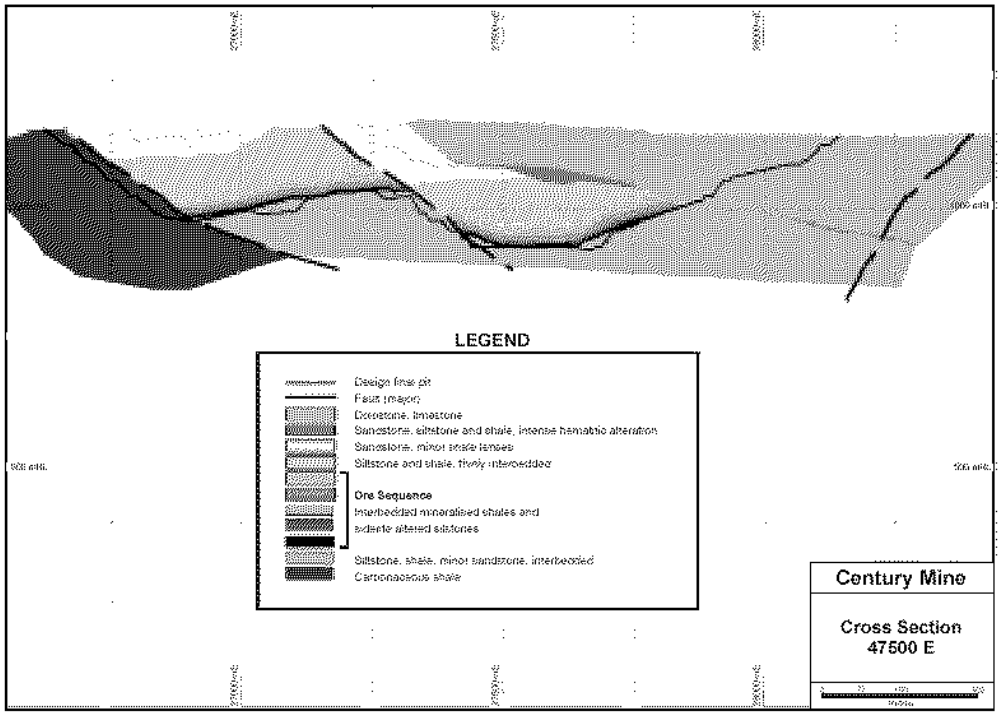
Most of the sulphide mineralisation occurs as layers parallel to bedding containing sphalerite, galena and pyrite and separated by less mineralised siltstone or mudstone marker horizons.

The mineralised interval is around 45m thick. Individual units have well defined lateral continuity and are readily identified in selective mining both by geological mapping and by their diagnostic responses to geophysical probes in blast holes. The orebody comprises a distinct Upper and Lower Zone separated by unmineralised interburden about 4m to 5m thick. The Lower Zone is 12m to 14m thick and has a higher zinc grade (around 15%) and lower lead (around 1%) and silver grades. The Upper Zone is 8m to 10m in thickness and has higher lead (around 4%) and silver grades but lower zinc (around 10%) grade. In the hangingwall and footwall of the mineralised layers, pyrite becomes the dominant sulphide mineral.

The top of the Upper Zone and bottom of the Lower Zone are assay cut-offs. Additional mineralised units above the Upper Zone can be selectively mined when the grade is high enough to allow for associated dilution.

Figure 3 shows a typical north-south cross section through the deposit.

Figure 3 Century Cross Section



3.2.2 Resource Estimation

The current resource model is based on some 650 drill holes and was prepared in October 2000. Nearly 300 additional holes have been drilled since then. Average hole spacing is 50m to 70m and, in some areas, the later drilling has closed that spacing to around 35m. In addition to the October 2000 estimate, there are later estimates (referred to as "short term" or "medium term" estimates) of active mining areas that include the additional drilling data. Both estimates also use channel samples of mineralisation in pit faces, more of this information, plus in-pit mapping and blast hole information, being used in the medium term estimates.

All drillhole collars were surveyed and channel sample locations are determined using global positioning system ("GPS") survey. Core recovery has been very good. HQ and NQ diameter diamond drilling is sampled as half or quarter core, with sample preparation on site and analysis at a number of commercial laboratories and, since mining began, also at the on site laboratory. Historically there have been some inconsistencies in assay methods and in repeatability of silver assays but for recent work, assay quality control monitoring is appropriate. There is no top-cutting of the higher assays.

The resource estimate is based on a three-dimensional seam model, with regular block dimensions in plan and variable heights constrained by the interpreted boundaries of each rock type or mineralisation unit. The October 2000 model uses 10m x 10m blocks, the medium term model 5m x 5m. Estimation within each layer is constrained to the data that fall within the layer,

providing a tight geological control on sample selection and grade estimation. The hematite line is treated as a hard boundary.

Grade estimation for zinc, lead, silver, iron, manganese and sulphur has been by two passes of ordinary kriging. Bulk density has been calculated from the assays but the reliability is supplemented by gamma logging, drill core measurement and in-pit samples. There is some evidence that some ore densities may be slightly overestimated and waste densities slightly underestimated.

The October 2000 resource has been estimated at a cut-off grade of 3.5% Zn in a process that accumulates mineralised units until the average grade of the last two units is below cut-off.

Reconciliation analysis for the two years to 31 March 2003 indicates that there are some deficiencies in geological interpretation and in the October 2000 resource estimate. Zinc and silver grades are possibly over estimated and lead possibly under estimated. The impact of the hematite line in the reduction of the ore limits has been greater than anticipated; the impact of faulting on both grade distribution near the main faults and displacements of ore blocks was not fully identified and the distribution of grade in one particular unit was incorrectly estimated. The net effect has been a loss of over 1 Mt of estimated reserve in the area mined in the two-year period but Century geologists believe the impact on future mining areas will not be as great.

AMC thinks that the resource estimate has been prepared to appropriate industry standard and is reported in accordance with the JORC Code but that, given the additions to data and to knowledge of mineralisation distribution since October 2000, an updated resource estimate is necessary.

3.2.3 Resource Classification

Resources have been classified by consideration of the distance of any estimation cell from actual sample data relative to the geostatistically assessed variogram range. In AMC's opinion, the approach to resource classification is consistent with the JORC Code but because it appears that there are inaccuracies in the October 2000 resource model, the classification of some 75% of the resource as Measured (and hence the more than 75% of the reserve classified as Proved) implies too high a confidence level.

Table 4 Century Mineral Resources as at 31 March 2003

	Tonnes (millions)	Zn (%)	Pb (%)	Ag (g/t)
Mineral Resources				
Measured	60.1	13.5	1.8	45
Indicated	18.3	12.0	1.4	38
Inferred	0.2	4.0	0.6	8
Total	**78.6**	**13.2**	**1.7**	**43**

Includes ROM stockpiles of 0.36 Mt at 12.5% Zn, 1.9% Pb, 65 g/t Ag and "high grade marginal" stockpiles of 0.01 Mt at 5.1% Zn, 1.3% Pb, 50 g/t Ag.

3.2.4 Ore Reserve Estimation

Estimation of reserves from the resource model assumes that ore will be mined as two or more discrete seams within an economically optimised pit design which now excludes a previously planned area of mining to the south-west, then referred to as Stage 7. A variable zinc equivalence cut-off grade that depends on the mine scheduling of a particular block is applied. It has varied over time between 6.5% Zneq and 4.5% Zneq in order to make optimum use of the plant capacity and to control feed grade to the mill. Current projections use 4.5% Zneq. In the equivalence calculation, 1% Pb = 0.5% Zn; the prices used being US$800/t for zinc and US$495/t for lead (at an exchange rate of A$=US$0.565). The waste interburden forms a natural boundary between Lower and Upper Zones and is thick enough to be selectively mined as waste.

The determination of reserve thickness in each of the Upper and Lower Zones is iterative and uses the stated cut-off grades in the same way as for estimating resources. Call factors are then applied to resource grades within the reserve limits to allow for dilution and ore loss. The call factors for the March 2003 reserves (Table 6) are based on the two-year reconciliation to 31 March 2003.

Outside of the main reserve limits, particularly above the Upper Zone, certain mineralised horizons may be selected for mining. It was estimated in November 2003 that some 0.1 Mt additional to reserve has been so mined in the current Stage 3 of the pit. The significance of this additional ore increases as the dip flattens and the mining width thickens.

Medium-term mine planning uses a revised resource model for the active mining area that incorporates changes in geological interpretation based on close spaced drilling and channel sampling and uses call factors that may not accord with those used for the October 2000 resource. Century's reconciliation of 24 months production to 31 March 2003 against this medium-term model concluded call factors of +2.4% for tonnes and –13.7% for zinc grade (Case 4 in Table 5). Century's reconciliation of the October 2000 model for the same period concluded call factors of +0.6% for tonnes and -4.3% for zinc grade after partially allowing for the nett loss of tonnes associated with the geological interpretation issues discussed above (Case 2 in Table 5). With full allowance for these issues (Case 3 in Table 5), the call factors assessed by AMC are +5.0% for tonnes and –9.2% for zinc grade and with no consideration of geological losses (Case 1 in Table 5), the respective AMC assessed call factors are –5.6% and –5.5%.

Table 5 summarises the March 2003 reconciliation analysis.

Table 5 Reconciliation Analysis, Two Years to 31 March 2003

	Tonnes (millions)	Zn (%)	Pb (%)	Ag (g/t)
Milled	10.36	12.43	2.44	63
Case 1 Oct 2000 Model	10.98	13.16	2.48	71
Case 2 -partly corrected[1]	10.30	12.96	2.60	69
Case 3 -fully corrected[1]	9.87	13.69	2.36	67
Case 4 Medium Term Model	10.11	14.13	2.48	71

[1]Corrected for geological losses referred to above

The relevant data for the current year to December 2003 has not yet been reconciled against the October 2003 model. Available data suggests a zinc grade shortfall relative to the medium term plan which may in part relate to mining issues discussed in Section 3.3.3.

The Ore Reserve is listed in Table 6. It is based on the October 2000 resource model with a cut-off grade of 4.5% Zneq and is depleted by the surveyed pit outline at 31 March 2003. It has been prepared by AMC technical consultants who were not involved in this review and is based on input from Century including use of call factors of +0.6% for tonnes, -4.3% for zinc grade, -6.8% for lead grade and -9.5% for silver grade. The reserve is estimated at the metal price used for zinc equivalent calculations but is not greatly sensitive to changes in zinc price in the order considered in this IOM because it is mainly limited by geology.

Table 6 Century Ore Reserves at 31 March 2003

	Tonnes (millions)	Zn (%)	Pb (%)	Ag (g/t)
Ore Reserves				
Proved	52.7	12.2	1.5	33
Probable	16.1	10.8	1.2	28
Total	**68.8**	**11.8**	**1.5**	**32**

Reserves are included in resources
Includes ROM stockpile quantified in Table 4.

As is apparent from the reconciliation analysis, there is room for error in the selection of call factors to convert the October 2000 resource to reserve. AMC's opinion in this review is that the tonnage factor should allow both for mining dilution and potential geological losses and that, as these are balancing adjustments, an outcome in which the reserve tonnage is similar to or greater than the resource tonnage from which it is developed is reasonable. This review concludes that the ore reserve estimate has been prepared to appropriate industry standard and reported in accordance with the JORC Code but when considering the overall reserve in Table 6, we think there is a risk that the average zinc grade could be overstated while the lead call factor could understate the average grade. We also note that selective mining of units above the Upper Zone should add small tonnages to the reserve.

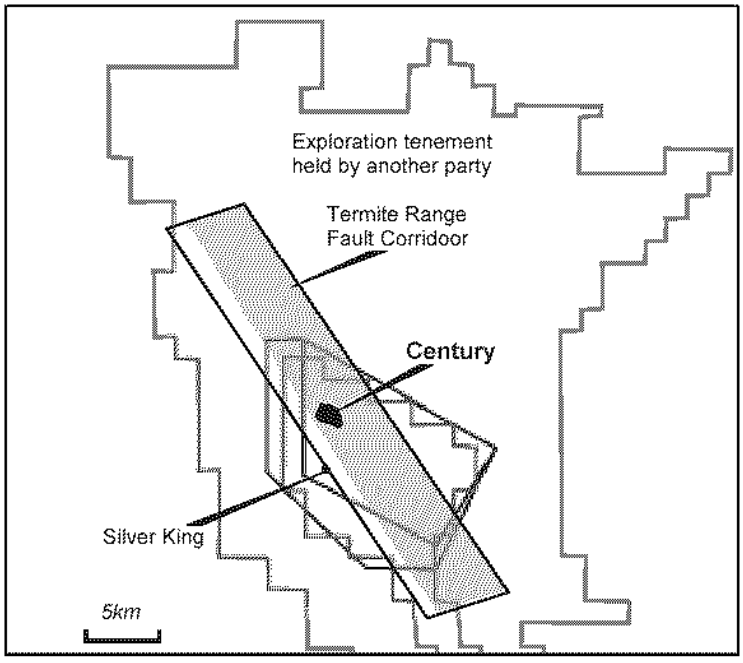
3.2.5 Potential for Resource and Reserve Additions

The Century deposit as known is physically bound in all directions by faults and by the unconformity so that its original depositional limits are not known. There has been limited exploration for additions in recent time but Century is considering a renewed program exploring both in the mining lease and, subject to finalising an agreement with the owner, within a tenement which covers areas of interest within the Termite Range fault corridor (Figure 4). Close to the mine, the main targets are:

- Extensions of the known mineralisation under shallow cover where displaced by faulting, the faulting pattern now being better understood from mining experience.
- Probably small additions associated with historically mined lead-silver-zinc vein type deposits in the vicinity such as the Silver King deposit.

- Occurrences of mineralisation in favourable host rocks close to the Termite Range fault structure, including units other than those which host Century.

Figure 4 Century Exploration Targets



In a district or regional sense, larger occurrences of lead-zinc-silver mineralisation will also be targeted, while noting that there has been considerable previous exploration in the Century region.

Additionally there is a possibility of increasing reserves by mining part of the mineralisation to the south-west of the current pit design within which there was an earlier estimated resource of 14.6 Mt of 11.2% Zn, 1.0% Pb, 12.5 g/t Ag. Optimisation studies which included mining a part of this resource indicated positive economics if the zinc price increased above the study assumptions of A$1,416/t (US$800 at A$=US$0.565). However, the area overlying this mineralisation has now been used as a waste dump, reducing the likelihood of it becoming economic for open pit mining in the future. Potential for its mining by either underground or open cut methods remains to be further assessed. Other small reserve additions could result from mining some non-reserve ore in the mineralised units above the Upper Zone.

3.3 Mining

Mining is by conventional truck and shovel open-pit methods. A mining contractor performs all mining activity while Century retains responsibility for geology, mine design and planning.

Reserves are sufficient for 13 years at a production rate of about 5 Mtpa, with a waste to ore ratio of approximately 9.2 to 1 on a tonnage basis.

A substantial portion of the waste is the overlying limestone, which by its porous nature is a massive aquifer and has had to be dewatered ahead of mining. A major dewatering effort is necessary to minimise pit inflows and to stabilise pit walls.

The majority of the waste overlying the Upper and Lower Zones is mined using large mining equipment suited to non-selective bulk mining. The Upper and Lower Zones and the interburden are mined separately using smaller sized equipment suited to selective mining. Each zone has differing metallurgical characteristics and there is a need for substantial ROM stockpiles in order to provide a suitable blended feed to the mill. The Upper Zone is generally higher in lead and lower in zinc and the zones have differing hardness, which affects grinding performance.

The original mine design envisaged that the final pit would be excavated in a number of stages that would both deepen the pit and extend it in a northwesterly direction. Ore is currently being mined from Stage 3 while the majority of waste is being mined in the Stage 4 cutback. Century currently envisages completing the pit by mining a further four stages. The sequencing of the stages provides the opportunity for some in-pit waste dumping.

The current pit design excludes some mineralisation located to the south-west of the pit that was included in the original feasibility study pit design, as discussed in Section 3.2.

3.3.1 Operations

AMC considers the mining equipment and mining methods used to be appropriate for the scale of the operation and the geometry of the deposit.

Two 42 m^3 bucket rope shovels loading 240t capacity trucks mine the bulk waste on 16m high benches. In the more difficult near surface limestone 8m high benches are used. A 22 m^3 hydraulic excavator is used as a back up for the rope shovels.

The ore and the interburden waste are mined on 8m high benches in 3m flitches, with 14 m^3 bucket excavators loading 170t capacity trucks.

Selective mining is guided by probing of blast holes, with gamma ray logging and magnetic susceptibility measurement of the various ore and waste bands, by face mapping and by channel samples. GPS technology is employed to assist selective mining. Productivity is assisted by a computer-based despatch and recording system.

Mining is under contract to the Roche Eltin Joint Venture ("REJV"). The bulk of the mining equipment is leased by Century and is operated by the REJV. Equipment maintenance is carried out within Century owned workshop facilities by the original equipment manufacturers under sub-contracts to the REJV. The maintenance contracts allow for rise and fall, including currency effects. The equipment condition is generally satisfactory.

The equipment financing leases terminate in August 2004. Century proposes to exercise an option to purchase the equipment at a cost of $30.9M and to payout the balance of the lease payments in February 2004. The REJV mining contract also terminates in August 2004, Century

can then renegotiate a further two years with the REJV, engage an alternative mining contractor or change to owner operation. Century is currently evaluating these options.

The mining contract was initiated on a schedule of rates basis. Contractual arrangements are now subject to an annual negotiation.

Waste stripping has fallen behind the original feasibility study in recent years as a result of cash constraints. Consequently there is a need to increase the waste stripping rate to ensure continuity of ore supply during the transition between stages. The critical nature of this issue has been recognised by Century and it has recently arranged for the supply of additional trucks and loading equipment. It is also developing medium and long-term plans for the mining sequence with cognisance of geotechnical factors and dump construction that should, with the additional truck haulage capacity, reduce the risk of a hiatus in ore production to an acceptable level. AMC supports Century's actions in this regard.

The current truck fleet comprises sixteen, 240t capacity (Komatsu 830E) trucks and ten 170t capacity (Komatsu 630E) trucks. It is planned to lease a further five 240t trucks and one 9 Mbcm capacity hydraulic shovel. Delivery of the trucks by the required dates, in June and July 2004, will be critical to meeting Century's planned waste stripping schedule and ore production plan.

3.3.2 Geotechnical

The upper part of the limestone is heterogeneous with areas of competent limestone and areas of very weathered limestone, which has caused difficulties with drilling and blasting.

The mineralised zone has been affected by local scale faulting which needs to be identified by closer spaced drilling ahead of the mining.

The key medium term geotechnical issue is the stability of the eastern wall where, because of low angle faulting, part of the orebody is under the existing pit wall. Independent geotechnical consultants have carried out extensive analysis of the area and have recommended cable bolting and the leaving of a buttress comprising approximately 450,000t of Stage 3 ore to stabilise the wall. Century is currently acting on this advice. It proposes to eventually recover the ore by progressively extracting the buttress while using the extension of the in-pit waste dump to stabilise the pit wall. Studies by Century's geotechnical consultant indicate that this can be achieved with an acceptable factor of safety although not completely without risk of some ore loss.

While the current low angle fault is believed to be an isolated structure, it is not known if there are other, as yet undetected, faults that may impact on the east wall as the pit is extended to the northwest. The design of the pitwall is subject to ongoing review and redesign where possible as more drill hole data is interpreted. This process is important to identify the best possible location for the pitwall/footwall interface to ensure geotechnical stability, minimal waste removal and optimal ore recovery.

In general, the sequence of overlying waste, ore and the weaker underlying shales represents a difficult geotechnical combination and the design of pit slopes and the scheduling of mining and in-pit dumping require regular geotechnical monitoring and review.

3.3.3 Mine Planning

The current mining schedule has been influenced by the need to maximise the production of metal in concentrates thus reducing unit costs and benefiting cash flow at a time of low metal prices. Much of the mining cost is fixed so scale is important to maintain low unit costs.

As a result of a decision in 2002 to reduce the planned waste-stripping rate in order to manage cash flow, shovel capacity has been and remains underutilised. The proposed additions to the truck fleet will enable the two 42 m^3 shovels to be operated at capacity. Additional digging capacity will also be required to help catch back the waste stripping shortfall. Consequently, Century plans to purchase a 28 m^3 hydraulic shovel which will also replace the existing 22 m^3 backup shovel that is in poor condition.

Recent major failures of the rope shovels have reduced the availability of these units. Century believes that improved availability should be achieved following the major repairs and preventative maintenance carried out on these units during January and February.

Medium term planning indicates that ore from Stage 3 and from stockpiles should be sufficient to meet the production forecast until mid to late August 2004 and that ore will be exposed at the northern end of Stage 4 during July, providing approximately one month overlap between stages. Initially, approximately one third of the ore in Stage 4 will be exposed, with more ore being exposed as the remaining waste is progressively removed. Maintaining sufficient stocks of fully exposed ore and ROM stockpiles during 2005 will remain a critical aspect of the operation.

In AMC's opinion the mining sequence and the equipment productivity rates underlying the medium term plan are reasonable. It should be noted however that the proposed working areas on each bench are smaller than have been mined previously and there is a risk that congestion and interaction between mining activities will reduce efficiency and productivity.

AMC is of the view that the one-month over-lap between Stages 3 and 4 provides little scope for slippage should equipment breakdowns and other adverse events coincide to reduce waste stripping. The limited overlap also provides little scope to vary the ore mining schedule in response to any short range grade variations or to compensate for such variations by blending with diminished ROM stocks.

Despite these concerns AMC believe that there is a reasonable probability that the risks associated with the transition between Stage 3 and 4 can be managed, providing rigorous planning and monitoring is applied to this aspect of the operation, and that any shortfalls against plan are responded to promptly and effectively.

Longer term planning indicates that a similar critical period may occur between Stages 4 and 5 during 2007 and 2008. AMC is of the view that there may be opportunities to reduce the risk

associated with this and subsequent transitions with further planning and refinement of the longer-term mining sequence.

It should be noted that AMC has been unable to fully reconcile the planned mining and processing schedules with the ore reserve estimate shown in Table 6. The scheduled tonnage exceeds the ore reserve estimate by approximately 1.2% while the scheduled zinc metal content of the ore mined and milled is greater by 1.5% and 1.3% respectively. AMC has been unable to identify the reasons for the differences but notes that the production schedule has been based on a combination of the October 2000 resource model and the model used for medium term planning whereas the reserve estimate used the October 2000 resource model only. Despite the differences, AMC considers the mining schedule to be a reasonable forecast of the likely production over the life of the mine.

The historical and planned ore and waste mining schedule is shown in Table 7.

Table 7 Historical and Planned Mining Schedule

Period ending	Ore Mined	Grade			Waste mined
	(Mt)	%Zn	%Pb	Ag g/t	(Mt)
2002 Actual	5.28	12.7	2.3	59	77.9
2003 Actual	5.11	13.0	1.5	55	67.8
2004 Forecast	6.47	11.8	2.4	78	72.9
2005 Forecast	6.96	11.9	2.2	66	82.0
2006 Forecast	4.52	12.8	1.7	57	93.3
2007 Forecast	4.06	11.7	1.5	33	84.6
2008 Forecast	5.16	12.8	1.5	22	78.6
2009 Forecast	5.31	11.2	1.6	44	71.2
2010 Forecast	4.19	12.0	1.2	24	59.6
2011 Forecast	6.74	11.6	1.5	21	13.5
2012 Forecast	4.61	11.2	0.9	13	28.8
2013 Forecast	5.42	11.9	1.0	18	21.0
2014 Forecast	5.91	11.5	1.1	13	9.7
2015 Forecast	5.91	11.5	1.1	13	9.7
2016 Forecast	2.79	11.6	0.8	10	1.6
Total from 2004 onwards	**68.06**	**11.8**	**1.5**	**34**	**626.5**

The tonnages and grades shown in 2004, 2005 are based primarily on Century's medium term orebody model and schedule. Tonnages and grades in subsequent years are based on the October 2000 Resource Model. In 2006 the tonnages and grades have been adjusted to reconcile minor differences between the two models.

Totals include rounding adjustment.

3.4 Metallurgy

3.4.1 Century Ore Mineralogy

Century ore provides lead and zinc concentrates with by-product silver. The sphalerite has a low iron content, which minimises the production of residues from smelting of the zinc concentrate. However, the ore also contains silica and carbon (present as a kerogen) as very fine particulate impurities and limits are imposed on their levels in the concentrate because of processing difficulties in the smelting operation.

Because it is necessary to control the levels of fine silica and carbon, the concentration process is relatively complex. Ultra-fine grinding to less than 80% passing 6.8 microns in the final flotation

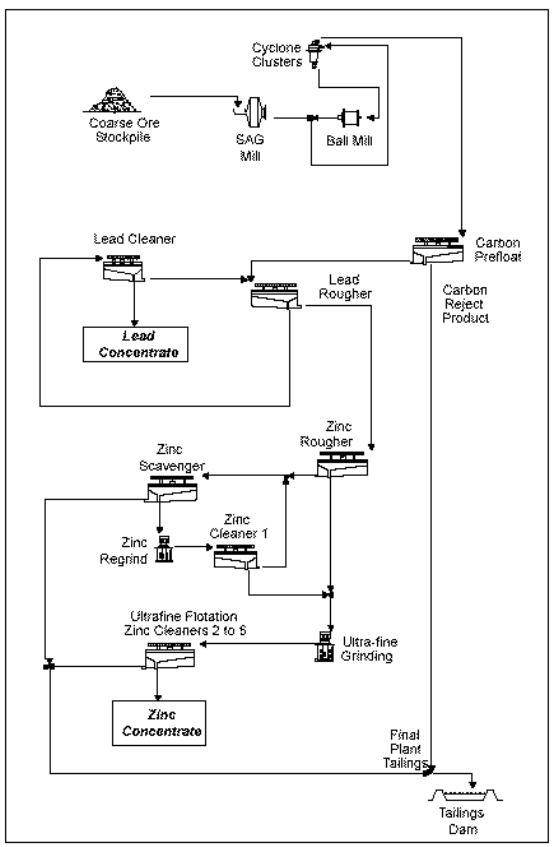
stage is required to liberate the silica impurity. Beneficiation by froth flotation requires special techniques at ultra-fine sizes.

3.4.2 Process Description

ROM ore is crushed to finer than 400 mm and is fed via a 15,000t coarse ore stockpile to the grinding circuit which comprises a 12.0 MW SAG mill followed by a 6.7 MW ball mill. The classified ball mill product is sized at 80% finer than 56 microns and passes to the flotation circuit.

In the first stage of the flotation, part of the naturally floating carbon is removed and discharged with the final plant tailings. In the second stage lead concentrate is produced through roughing and cleaning flotation stages. The tailing from lead flotation passes into the zinc circuit through a rougher, scavenger and cleaning sequence (the primary flotation stage), with the scavenger concentrate being reground in sand mills prior to the first cleaning stage. The concentrates from the rougher and first cleaner stages become the feed to the ultra-fine circuit which is first reground to a nominal sizing of 80% finer than 6.8 microns to release silica then fed to four sequential cleaning stages producing the final zinc concentrate. Ultra-fine circuit tailings are combined with the scavenger tailings and initial carbon concentrate and sent to the tailings thickener from which the thickened tailings are pumped to the tailings dam (Figure 5).

Figure 5 Century Process Plant Schematic Flowsheet



The lead and zinc concentrates are separately thickened before being sequentially pumped as discrete product batches through a common pipeline over a distance of 304 km to the port site at Karumba.

The concentrates are dewatered at Karumba using separate thickeners, pressure filters and in the case of the zinc concentrate, an oil fired rotary dryer. Final zinc concentrates are pelletised during the drying process, which together with appropriate stockpiling and product handling techniques serves to avoid spontaneous combustion of the zinc concentrate during storage and shipping. A spray system has also been installed which allows the zinc concentrate pellets to be coated if required with a surface sealant that further inhibits self-heating.

Dried concentrates are stored in a covered shed with a nominal capacity of 80,000t prior to reclaim and loading into a specially designed transfer vessel for transportation to ships anchored in the Gulf of Carpentaria. The transfer vessel can carry loads of approximately 5,000t of concentrate.

3.4.3 Metallurgical Performance Analysis

Process design considered the changing Pb:Zn ratio of the ore over the life of mine. The average design mass balance criteria were:

- A unit feed rate of 620 tph for 5.04 Mtpa ore.
- An average feed grade of 12.5% Zn, which at an average recovery of 82.2%, gave an annual zinc output of nearly 520,000t of zinc.
- A zinc concentrate grade of 57.5% Zn with 2.2% Pb and 3.5% SiO_2.
- A lead concentrate grade of 60% Pb at 52% recovery from an average 1.7% Pb feed.

Recent plant metallurgical performance is summarised in Table 8.

Relevant observations are;

- The lead circuit concentrate grade and recovery have been consistently above the design level.
- The zinc concentrate grade has been consistently at or above the design level but the silica level has not achieved the designed 3.5% SiO_2. However an average 4.0% SiO_2 assay in the zinc concentrate was achieved overall for 2002 and 4.1% SiO_2 for 2003.
- Although the zinc recovery has on average been below design, monthly zinc recoveries have nevertheless been progressively increasing overall. The design zinc recovery level was maintained on average over the period from February to April 2003 together with an above-design zinc concentrate assay.
- There has been a progressive improvement in concentrate grade and recovery for both lead and zinc as well as in the plant throughput rate.

Design was for a nominal 77.5 tph of zinc metal units in the feed but the plant has been able to accommodate about 80 tph zinc before materials handling constraints have been experienced. AMC's view is that this is a likely effective throughput limit with the current plant configuration. The plant feed rate averaged 78.2t of zinc metal per operating hour for 2003 and has maintained an average 76.0 tph of zinc metal input for the first six months of the current production year.

There is presently an excess of filtration capacity available at the dewatering plant although some risk to production arises because the quality of the water removed from the concentrate limits the water disposal methods that are currently available. The installation of additional water treatment facilities should mitigate against this problem.

Table 8 Lawn Hill Plant Performance Summary, Financial Year 2002 to December 2003

Month	Feed			Zinc Concentrate				Lead Concentrate		
	Rate	Assay		Assay			Zn Rec	Assay		Pb Rec
	tph	% Zn	% Pb	% Zn	g/t Ag	% SiO_2	%	% Pb	g/t Ag	%
Year 2002	**591**	**12.7**	**2.3**	**58.0**	**200**	**4.0**	**77.7**	**68.0**	**235**	**68.1**
July 2002	624	12.9	2.0	58.8	196	4.1	78.3	67.7	293	67.7
Aug 2002	623	13.0	1.8	59.1	185	4.0	79.0	70.2	229	72.7
Sept 2002	621	12.8	1.6	59.1	159	4.1	80.0	71.1	259	71.4
Oct 2002	624	12.6	1.4	59.0	188	4.1	79.1	70.9	223	73.0
Nov 2002	585	12.4	1.3	58.3	195	4.0	80.4	72.1	269	72.8
Dec 2002	637	12.8	1.6	58.7	224	4.0	80.0	70.5	233	71.8
Jan 2003	619	12.6	1.6	59.2	203	4.1	79.4	71.4	192	67.9
Feb 2003	623	12.3	1.5	58.8	182	4.1	82.6	70.3	207	69.8
Mar 2003	619	12.4	1.9	58.9	184	4.1	82.5	71.5	217	74.6
Apr 2003	619	12.4	2.0	59.6	230	4.2	82.1	66.0	206	75.0
May 2003	628	12.3	2.1	59.4	242	4.1	80.5	67.0	218	74.8
June 2003	635	12.5	1.7	59.1	182	4.3	80.3	66.9	174	71.4
Year 2003	**622**	**12.6**	**1.7**	**59.0**	**197**	**4.1**	**80.3**	**69.4**	**226**	**72.1**
July 2003	640	12.1	1.7	59.6	205	4.3	78.2	67.2	234	73.3
Aug 2003	610	12.3	1.8	59.0	226	4.3	80.7	70.0	305	72.5
Sept 2003	637	11.7	2.3	58.6	250	4.4	81.7	72.1	349	74.9
Oct 2003	653	11.4	2.9	58.6	247	4.5	81.5	71.1	424	75.6
Nov 2003	658	11.3	2.8	58.8	276	4.5	80.6	72.2	451	74.6
Dec 2003	676	11.7	2.9	58.8	260	4.4	80.6	71.6	482	74.1
YTD Dec 2003	**646**	**11.8**	**2.4**	**58.9**	**244**	**4.4**	**80.5**	**70.9**	**392**	**74.5**

In November 2002 there was a write-down of 1,065 dry tonnes in the nominal lead concentrate inventory and in the YTD lead recovery value after reconciliation.

3.4.4 Process Constraints

A number of capacity and process constraints currently limit metallurgical performance and production output but are generally being addressed.

Higher throughput rates at the target grind size cannot be achieved without installing additional secondary milling capacity. Although sufficient space for a second ball was included in the plant design there are currently no plans for such an installation.

Lower levels of silica in the primary zinc concentrate are obtained with lower flotation densities. With less silica, the ultra-fine flotation section is easier to control resulting in higher zinc recovery. Additional flotation cells installed in 2001 and in late 2002 allow lower flotation densities to be maintained in the primary zinc circuit. The scavenger concentrate regrind capacity was also increased in late 2002 to assist in liberating silica and to enhance overall zinc recovery.

To date, it has been difficult to consistently achieve levels of silica in zinc concentrate below 4.0% without loss of zinc recovery. In consultation with the major customers, the recent operating strategy has been to increase silica levels to 4.5% SiO_2 and thus achieve higher overall zinc recovery.

3.4.5 Tailings Disposal

The tailings disposal system was originally designed for an 11-year life with the ability to extend life by subsequently raising the dam wall. Because of low tailings densities during the initial plant operation, the angle of response of the settled tailings has been lower than design, compromising long-term storage capacity. However, recently higher tailings beach angles have been obtained by operating the tailings thickener to produce higher underflow densities. AMC thinks that this will effectively address the tailings storage capacity problem and considers that the overall tailings management plan is appropriate. Century propose to raise the tailings dam wall in 2006.

3.4.6 Performance Enhancement Projects

It is proposed to install a new carbon preflotation cleaner cell to reduce loss of zinc in the carbon prefloat concentrate. The system is expected to be operational in April 2005 and is forecast to result in an incremental improvement of 1% in zinc recovery and a slight improvement in lead recovery.

There is potential for additional performance enhancement projects, which are not included in the Long Term Plan. These include the installation of a rougher concentrate cleaner cell, which could potentially upgrade a proportion of the rougher concentrate into final grade product, allowing this material to by-pass the ultra-fine cleaners and so alleviate the current process demands in the ultra-fine cleaner circuit. The ultra-fine cleaning circuit is currently operating at close to maximum capacity so that the potential also exists to generate a further recovery improvement by the provision of increased cleaning capacity through the installation of additional ultra-fine flotation cells.

It should be noted that the current zinc recovery level represents a relatively low base and future developments in technology and enhanced equipment operation may, over time, enable higher recoveries to be achieved.

3.4.7 Production Plan

Concentrator forecasts for 2004 to 2006 are summarised in Table 9.

Table 9 Concentrate Production Forecast for Century, 2004 to 2006

Year	Mill feed				Zinc Concentrate			Lead Concentrate			
	Feed	Assay			Conc.	Assay		Conc.	Assay		
	Tonnes 000	% Zn	% Pb	g/t Ag	Tonnes 000	% Zn	g/t Ag	Tonnes 000	% Pb	% Zn	g/t Ag
2004	5,382	11.8	2.4	78	863	58.3	274	136	66.9	4.7	281
2005	5,336	11.9	2.2	66	886	58.0	213	125	64.3	5.1	323
2006	4,864	12.8	1.7	57	877	58.8	188	86	67.4	5.4	278

Forecast zinc metal in concentrate for shipping is around 503,000t in 2004 and 514,000t in 2005, generally similar to the 2003 production of 520,327t.

The silica content of the concentrate is forecast to be 4.5% SiO_2 during 2004 as an outcome of a high silica production trial. Following completion of the trial period it has been assumed that the silica content will be maintained at 4%.

Recovery of zinc to concentrate at the Lawn Hill concentrator has been forecast at 79.6% for 2004 increasing to 81.7% for 2005. From 2006 onwards further small improvements in zinc recovery have been forecast.

The low forecast recovery for 2004 results from a recent review of likely zinc production in concentrate for the full year. Actual production of zinc, prior to dispatch to the port, during the first half of 2004 totalled 249,461t of zinc. This compared to a full year forecast prior to review of 513,636. Following the review, Century adjusted the full year forecast to 502,843t reflecting an expectation that recovery and possibly mill throughput would be lower than originally forecast. Century chose to carry out the adjustment by downgrading the recovery forecast rather than reforecasting both recovery and mill throughput. While this has had the effect of decreasing the recovery further than might otherwise be expected, AMC thinks that the overall effect of the adjustment is reasonable and provides a realistic estimate of zinc production for 2004.

AMC believes that achieving the forecast zinc recovery in 2005 will be challenging but will be aided later in the year by the installation of the new carbon pre-flotation cleaner cell. Recovery forecasts in subsequent years may also be difficult to achieve but there are opportunities to improve recovery by accepting higher silica levels in concentrate and through continued optimisation of the process over time. AMC therefore believes that the longer-term recovery forecasts are reasonable.

The predicted lead circuit performance in 2004 and 2005 is generally consistent with 2003 production year to date. Long Term Plan lead recoveries in subsequent years could be slightly optimistic given the decreasing lead head grade but the new carbon preflotation cleaner cell is expected to slightly reduce lead loss to the preflotation concentrate.

3.5 Operating Cost Estimates

Cash operating cost estimates in real terms are shown in Table 10.

Table 10 Operating Cost Estimate 2004 to 2006

Cost centre	2004 $M	2005 $M	2006 $M
Mining	147.0	167.4	174.2
Concentrator	103.1	103.7	99.9
Transport	5.6	11.6	5.8
Port	16.0	14.9	15.0
Administration and Services	48.8	50.1	50.0
Head office recharge	6.5	6.7	6.4
Total	**327.1**	**354.4**	**351.4**

Totals include rounding adjustments

The forecast mining costs assume a continuation of the contract mining arrangements, buyout of the existing mining equipment leases in February 2004 and the leasing of additional trucks and shovel in 2004. The increase in mining costs in 2005 to 2006 results primarily from the forecast increase in waste mining required to achieve the Long Term Plan.

Concentrator cost contains a high fixed component. Power cost, transport of the gas supply to the power station and some on-site service contracts are largely fixed apart from some small escalator or adjustment factors. There is a cost advantage in maximising throughput provided that any exceedence of the base load power draw is managed in a controlled manner. Century's indicative power cost including the cost of gas is $0.08 per kilowatt-hour.

Transport costs and port costs are to a large degree fixed. The increase in 2005 reflects the overhaul costs for the transfer vessel at Karumba and the cost of dredging the channel to the ship loading point, a two yearly requirement. Ownership costs associated with the leased pipeline, port and transfer vessel are excluded from the forecast operating costs, although they are included in Table 1 in this report. AMC has been advised that these costs are paid directly by Zinifex corporate.

Administration and service costs include the costs of site accommodation, commuting and other costs not reallocated to the production cost centres. These costs have a high fixed component.

AMC believes that the forecast operating cost for 2004, 2005 and for subsequent years in the Long Term Plan is reasonable.

3.6 Capital Cost Estimates

3.6.1 Mining Mobile Equipment

The mobile equipment budget for the open pit mining operation is summarised in Table 11.

Table 11 Mobile Equipment Capital Expenditure Plan

Item	2004		2005		2006	
	units	Cost $M	units	Cost $M	units	Cost $M
230t trucks (October 2003)	2	4.1				
170t trucks (December 2003)	2	1.3				
Exercise mining fleet purchase option	lot	30.9				
Wheel loader			1	2.0		
Water cart			1	1.2		
Dozer			1	1.2	2	2.4
Grader			1	1.0		
General capital			1	2.5	1	2.5
Total		**36.3**		**7.9**		**4.9**

In 2006 only minor expenditure is required to replace ancillary mining equipment. However, in 2007, 2008 and 2009 significant expenditure, $19.9M, $72.6M and $37.3M respectively, has been forecast for the replacement of a major proportion of the truck fleet, a number of hydraulic excavators and support equipment. AMC has reviewed the program for leasing and purchasing equipment over the Long Term Plan and believes it to be reasonably based and consistent with forecast material movement requirements.

3.6.2 Project and Sustaining Capital

Forecast capital expenditure requirements for the process plant, port and site infrastructure are shown in Table 12.

Table 12 Project and Sustaining Capital Items

Item	Estimated Cost ($M)		
	2004	2005	2006
Mine Technical Services	1.6	2.5	2.4
Concentrator	2.8	6.8	11.3
Port	2.4	3.9	2.0
Engineering and Site Services	0.9	1.6	1.5
IT and Communications	0.3	0.7	0.6
Safety, Health and Environment	0.4	0.3	0.2
Human Resources, General & Administration	0.3	1.0	0.6
Allowance for unallocated projects[1]	1.3	0.2	0.3
Total	**10.0**	**17.0**	**18.9**

[1] Includes a carry over into 2004 of approximately $1.3M from projects approved in 2003,

Expenditure in 2005 includes $2.0M for the installation of the preflotation cleaning cells and $2.2M for a water treatment plant at Karumba. In 2006 an amount of $7.0M has been included to raise the tailings dam wall. Expenditure in the order of $10M per year has been forecast in subsequent years to sustain the operation.

AMC considers the forecast capital program to be adequate to carry out the planned improvements to the concentrator and to sustain the operation. It considers it likely however, that

further opportunities to improve the performance of the operation will be identified over time which may require additional capital expenditure, particularly to enhance metal recovery.

3.7 Concentrate Pumping, Handling and Transport to Smelters

Concentrate pumping has generally been satisfactory, with the main operational problem experienced to date being "trail-out" of the coarser lead particles, which mix backwards into the next batch of zinc concentrate following in the pipeline. This problem has been largely addressed by controlling the pumping density of the lead concentrate at a slightly higher level at which settling out of the coarser (>25 micron) fraction is inhibited. Each batch of concentrate is first pumped around a test loop to assess the performance characteristics before it is allowed to enter the pipeline transportation system.

The pipeline has operated continuously since late 1999 apart from minor interruptions. An independent audit carried out by the designers of the pipeline some twenty months after the initial commissioning recommended some modifications to the operating procedures but found that the process personnel managed the pumping and pipeline system with confidence and with due care that would aid in ensuring the continued integrity of the concentrate transport system. The pipeline was designed to accommodate a maximum pumping rate of 155 tph of zinc concentrate whereas the current plant output averages about 105 tph of zinc concentrate.

During 2002, pipeline pump pressures progressively increased and it was identified that two sections of the pipeline's internal liner which had been improperly installed during construction were causing a pipeline restriction and required replacement. The physical remedy involved installing a temporary by-pass segment around each failed zone, replacing the offending sections of pipe and subsequently reinstating the repaired pipeline into normal operation. This exercise was successfully completed in two planned maintenance shutdowns during 2003 without major interruption to the process operation. The pipeline has been operating at design pressures once again since August 2003. The success of this exercise has to a large extent alleviated concerns that physical failure of the pipeline could significantly interfere with the Century operation.

An examination of the internal surface of the pipeline has revealed the build-up of a biological compound such that regular pigging of the line has now been implemented.

No significant constraints are presently experienced at the dewatering facility at Karumba, although water disposal requires continual monitoring. Water is discharged either into the Normanton River or to irrigated pasture. However water quality controls are imposed on the discharge product and the water treatment plant is currently being expanded to provide sufficient treatment capacity to allow water to be discharged without restriction.

Spontaneous combustion of zinc concentrate has been a problem in the past but it is now considered that with the use of appropriate materials handling procedures together with customer experience in applying such techniques, spontaneous combustion of concentrate can be avoided. The use of surface sealants on dried concentrate has been successfully trialled as a means of inhibiting spontaneous combustion and although a spray application system has been installed at

Karumba, sealants are not normally required provided that the correct materials handling procedures are employed.

Lead and zinc concentrates are separately reclaimed from the storage shed and loaded onto a concentrate transfer vessel which transports approximate 5,000t lots to ships anchored in the Gulf of Carpentaria. The transfer vessel, MV Wunma, is owned by Century but it is operated and maintained under charter by a specialist maritime contractor. From the environmental perspective, the transfer vessel operates with a zero spillage factor such that all dust collection and wash-down water including rainfall is stored on the vessel for subsequent discharge into the Karumba water treatment facility.

The first major five-year dry-docking is scheduled for the Wunma in August 2004, possibly in Singapore. Century and the contractor are currently managing the replacement vessel strategy jointly.

Around 50% of zinc concentrate is transferred to Zinifex smelters, with 85% of this amount going to Budel. It is anticipated that the proportion of zinc concentrate transferred to Zinifex smelters may increase to as much as 87% by 2005 as Hobart and possibly Clarksville increase their intakes. Hobart trialled higher proportions of Century feed in October 2003. The remainder is sold externally.

The majority of lead concentrate is expected to be transferred to the Port Pirie smelter for the life of mine, however spot sales of excess concentrate will occur while lead production is at current levels.

3.8 Environmental Impact, Protection and Rehabilitation Issues

Environmental impact, protection and rehabilitation issues have been reviewed by URS and a number of issues identified as potentially material. URS has carried out a probabilistic assessment of the financial liabilities represented by these issues, and amounts reflecting these liabilities have been included in the Long Term Plan.

3.9 Infrastructure and Services

Being in a relatively isolated location, the Century mine is necessarily self-sufficient with infrastructure and support services. All power is generated and an excess of water for process and other uses is extracted from bores.

A power line to the Century site draws power from a generator in Mt Isa, which uses gas piped from south west Queensland. Supply is under a take or pay contract. Previous increases in the gas supply unit rate experienced in 2003 have been reversed with the signing of a 3-year gas supply agreement with Santos Limited.

Communications are more than adequate. Water is sourced from the dewatering of the limestone overlying the deposit. Employees fly-in/fly-out on chartered aircraft to a sealed airport. Accommodation is provided in a modern 670 person accommodation village. The last 70 kms of

the road to Century is unsealed and therefore subject to closure in the wet season. Its standard is gradually being improved.

Some infrastructure and services are owned by third parties and leased back to Zinifex under long-term contracts. At the mine site, these include the reagent facility and mine accommodation village. Independently owned services include the gas power supply, slurry pipeline, port and transfer barge.

3.10 Management

AMC considers Century management to be competent. The accomplishments in the processing plant, in particular, are excellent in the circumstances. The concentrate pipeline and concentrate storage have represented technical challenges that have been mainly resolved.

While AMC considers the mining engineering staff and management to be competent, it believes that there are opportunities in the area of medium to long term mine planning that could be exploited given sufficient engineering staff. Staff turnover is reasonable given the location.

Occupational Health and Safety ("OHS") features as a priority in the management reports and is covered extensively. By observation there were no obvious safety hazards or poor practices.

At Century there is an emphasis on the training and development of an indigenous workforce to be employed in an industrial complex. The current statistics are favorable compared to industry generally.

3.11 Community Relations

Century's commitment to community agreements and local development is reflected in its management structure, the number of local people in employment and training and the rapid development of indigenous contracting organisations for civil works, building maintenance and cleaning/laundry. A demonstration at the Century accommodation village in November 2002 linked to dissatisfaction with management of the main agreement has led to a Century review. The review process and relationships are now progressing positively.

3.12 Production Economics

Key performance indicators and unit cost forecasts for 2004 and 2005 are shown in Table 13. The 2005 figures allow for estimated inflation, hence differ slightly from constant dollar figures in Tables 10 and 11.

Table 13 Key Performance Indicators for Century

Performance indicator		Unit	Financial years		Average
			2004	2005	
Mining					
Waste to ore stripping ratio		t : t	11.26	11.77	**11.53**
Annual ore mining rate		000 t	6,474	6,965	**6,719**
Processing					
Annual ore milling rate		000 t	5,382	5,336	**5,359**
Average head grade:	Zinc	%	11.8	11.9	**11.9**
	Lead	%	2.4	2.2	**2.3**
	Silver	g/t	78	66	**72**
Concentrator recovery to preferred concentrate:	Zinc	%	79.6	81.7	**80.7**
	Lead	%	74.1	72.2	**73.2**
	Silver to Pb conc.	%	12.1	11.6	**11.8**
Concentrate grade	Zinc	% (Zn)	58.3	58.0	**58.1**
	Lead	% (Pb)	66.9	64.3	**65.6**
Total concentrate Production	Zinc	000 t	862.5	886.4	**874.5**
	Lead	000 t	135.9	124.9	**130.4**
Operating Economics (nominal)					
Total annual cash operating costs[1]		$ Mpa	327.1	361.5	**344.3**
Mobile plant capital expenditure		$ Mpa	36.3	8.1	**22.2**
Sustaining capital expenditure		$ Mpa	10.0	17.0	**13.5**
Cash mining costs incl development		$/t ore[2]	27.32	32.01	**29.66**
Cash processing costs		$/t ore[2]	19.15	19.82	**19.49**
Cash land transport and port costs		$/t ore[2]	4.02	5.07	**4.54**
Cash admin. and head office recharge		$/t ore[2]	10.28	10.85	**10.57**
Total cash production costs[3]		$/t conc	327.56	357.43	**342.49**

Notes:

1. Stated costs include mine development but exclude royalties and equipment ownership costs associated with leased pipeline, port processing and ship-loading vessel. These costs are paid directly by Zinifex head office.
2. Per tonne of ore milled.
3. Stated costs covers all costs (refer Note 1) per tonne of concentrate produced up to loading of bulk carriers at the port of Karumba.

Beyond 2005, Zinifex forecasts that for the remaining 11 years of mine life:

- Zinc production levels and concentrate grades will be maintained at around 514,000 tonnes of contained zinc at grades around 58.8% zinc.
- Production of lead and silver in concentrates will progressively decline to around half of current levels over the next five years in line with reductions in ore head grade.
- Annual cash mining costs will peak in 2006 and progressively decline as the amount of waste pre-stripping diminishes.
- Average annual cash milling, concentrate transport, services and administration costs will be maintained at around 2004, 2005 levels.
- Mobile equipment capital costs will peak in 2008 with the replacement of a significant portion of the mining equipment fleet.

A number of minor inconsistencies have been noted in the forecasts, mainly for 2004 and 2005. The inconsistencies appear to result from different methodologies used for long term and short term forecasting and the adjustments made to reconcile inputs to medium and long-term financial models. AMC does not consider the inconsistencies to be material, and it believes that the physical and cost inputs to the forecasts are reasonable and that the Key Performance Indicators reflect the currently expected performance of the Century operation.

3.13 Risks and Opportunities

Century is large-scale by international standards and a key supplier of concentrates to Zinifex smelters. Through its ability to produce low-iron (therefore low-residue) zinc concentrates for the next 13 years, the mine is critical to ongoing operation of the Budel smelter and strategically important to economic performance of the Hobart smelter and, because it retreats Hobart's paragoethite residues, the Port Pirie smelter. Century is also an important supplier of lead concentrates to Port Pirie.

In AMC's view there are three main areas influencing the overall performance of Century:

High waste: ore ratio. For its remaining life around 9.2t of waste needs to be removed for each tonne of ore extracted. Furthermore, this stripping ratio is much higher in 2006, 2007; averaging approximately 20:1. Although costs for the advanced component of waste stripping are capitalised for amortisation over the period during which accessed ore is ultimately won, the program places a strain on cash generation.

Metallurgical complexity. Century ore exhibits complex mineralogy and requires very fine grinding and multi-staged flotation. Furthermore, metallurgical recoveries are relatively low. Around 82% of metal value contained in mill feed is recovered into concentrates. The separation of zinc from very fine silica is a particular issue in flotation.

Moderate ore grades. Although zinc is of medium-to-high grade at 11.8%, lead and silver grades are relatively low. With the bulk of silver reporting to zinc concentrates, Century receives only minimal payment for that metal.

The following key risks have been identified:

- In respect of the reserve tonnage, there is a risk of greater geological loss than is presently estimated. This may be offset by greater mining dilution than inherent in the estimating process and to some extent by gains from non-reserve upper horizons and possibly by reinstatement into the mining plan of mineralisation in the southwest corner of the current pit design. AMC believes that the resource estimate should be updated and that continuing reconciliation analysis will improve the reliability of the reserve estimates.

- In respect of the reserve grade, AMC considers there to be a low to moderate risk of zinc grade being modestly overestimated. This is offset to some degree by the possible underestimation of the lead grade.

- In respect of the potential for an increase in the stripping ratio, AMC is of the view that there is a possibility that more complex geotechnical conditions exist than are currently anticipated. This might require redesign of parts of the pit resulting in an increased stripping ratio. However, offsetting this risk there may be an opportunity to redesign the current stages to defer waste stripping until later in the mine life. Ongoing monitoring and geotechnical input to pit design and scheduling studies will be required to optimise the design of the remaining stages.

- The one-month overlap in ore supply between Stages 3 and 4 provides little scope for slippage should equipment breakdowns, the delayed arrival of additional trucks and digging equipment or other adverse events coincide to reduce the waste stripping rate. The limited overlap also provides little scope to vary the ore mining schedule in response to any short range grade variations or to compensate for such variations by blending with the diminished ROM stocks. Because of the high fixed cost structure of the operation any shortfall in ore feed to the mill would have a significant impact on cash flow. Century will need to ensure that rigorous planning and monitoring is applied to the waste stripping aspect of the operation and that any shortfalls against plan are responded to promptly and effectively.

- AMC believes that zinc recovery forecasts can be achieved. However, due to the complexity of the operation there is some risk, particularly in 2005, that metallurgical performance will be lower than forecast.

- Achieving concentrate specifications in respect of silica has been problematic since the start of the operation. This is likely to remain an issue requiring ongoing technical and commercial efforts to minimise the impact of high silica on the down stream processes.

- Century has carried out equipment reliability investigations and implemented planned maintenance practices. In general, AMC considers that there is a low risk of mechanical breakdowns having a significant impact on production.

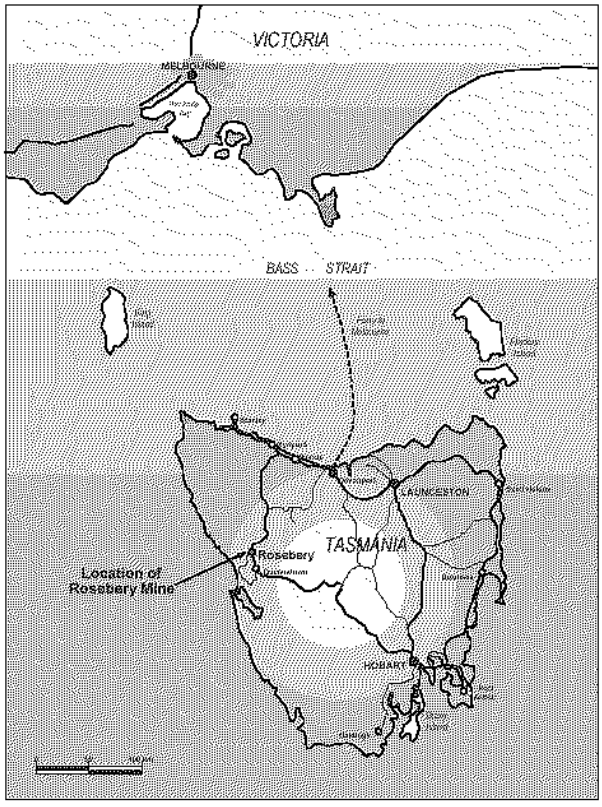
4 ROSEBERY MINE

4.1 Introduction

The Rosebery underground mine is located near a township of the same name in north western Tasmania. Small-scale open cut and underground mining commenced shortly after discovery in 1893 and continued intermittently until 1936 when Pasminco's predecessor (Electrolytic Zinc Company) commenced operations. Rosebery is a high grade polymetallic deposit that has consistently produced at about 0.5 Mtpa of zinc, lead, silver, copper and gold ore over many years. Over the last three years production has increased to the current level of around 0.8 Mtpa.

The Rosebery complex comprises the Rosebery underground mine and associated concentrator. Concentrates are railed to Burnie on Tasmania's north coast, stockpiled and loaded onto vessels under contract.

Figure 6 Location of Rosebery Mine



4.2 Geology, Mineral Resources, Ore Reserves and Exploration Potential

4.2.1. Geology

The Rosebery polymetallic deposit is a volcanic hosted massive sulphide ("VHMS") deposit located within the Mount Read Volcanic Arc of Western Tasmania, which also hosts similar deposits such as Hercules, Que River, Hellyer and Mount Lyell. The major structural elements in the region are the Henty Fault to the east and the Rosebery Fault to the west. On a mine scale, the deposit occurs as a series of tabular and roughly conformable lenses that dip east at approximately 45°, extend over 3 km in strike and extend below surface to approximately 1,000m in the south, plunging to over 1,500m in the north.

Mineralisation is comprised predominantly of sphalerite-galena-pyrite with minor tetrahedrite, arsenopyrite and gold. The sulphides may be massive, semi-massive or disseminated. A mineral zonation has been recognised in some areas with lead-zinc mineralisation merging into massive pyrite-chalcopyrite mineralisation and then disseminated pyrite-chlorite mineralisation on the footwall and merging into barite-carbonate mineralisation on the hangingwall.

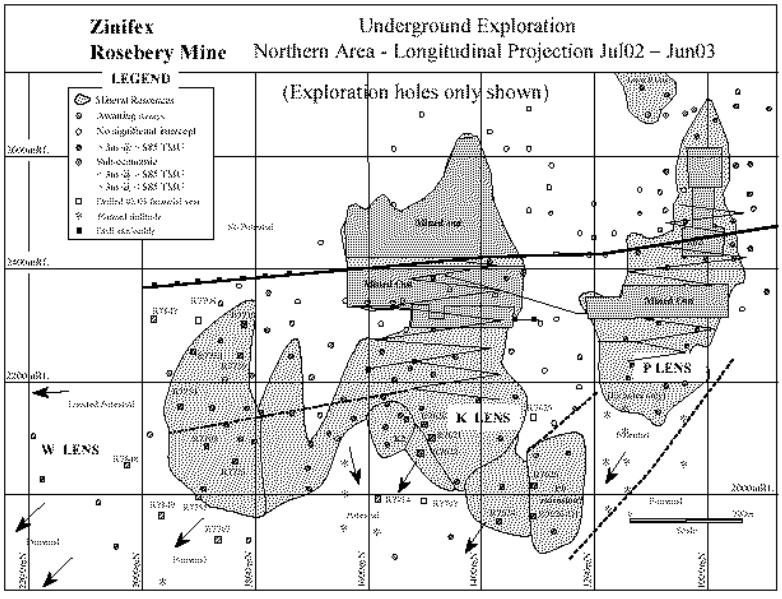
At depth, metamorphism interpreted as being associated with a Devonian granitic intrusion has resulted in some replacement of the sphalerite-galena-pyrite mineralisation by various

assemblages of magnetite, pyrrhotite, biotite, tourmaline and quartz, particularly at the south end of the mine.

The future of Rosebery currently depends primarily on the P and K Lenses (Figure 7). The distribution of mineralised zones in P Lens is moderately complex, with mixed, en-echelon lenses of massive/semi-massive sulphide and disseminated sulphide and disruptions caused by faulting and folding. Boundaries are somewhat gradational, resulting in resource estimates being sensitive to changes in cut-off grade. K Lens is geologically simpler than P Lens with reasonably sharp boundaries, although the presence of folding and faulting requires close-spaced drilling in places to define shapes adequately. Parts of K Lens are relatively thick, upwards of 20m horizontal width.

V Lens is higher in the mine, lying to the south of P Lens and could provide an alternative supply given constraints at deeper levels due to higher temperature. Rosebery has initiated development towards and definition of V Lens.

Figure 7 Longitudinal Projection of P and K Lenses



4.2.2 Mineral Resources

Mineral Resources as at 31 March 2003 are listed in Table 14, the 2002 figures have been included for comparison.

Table 14 Mineral Resource Estimates, Rosebery Mine, 31 March 2003

Year	Category	Tonnes (000t)	Zn (%)	Pb (%)	Cu (%)	Ag (g/t)	Au (g/t)	Fe (%)
2003	Measured	2,414	13.3	4.3	0.52	149	2.4	10.8
	Indicated	1,157	11.9	3.7	0.29	166	2.7	8.5
	Inferred	5,333	16.8	5.0	0.43	170	2.4	9.5
	Total	**8,905**	**15.2**	**4.6**	**0.44**	**164**	**2.4**	**9.7**
2002	Measured	2,048	12.2	4.1	0.43	125	2.4	8.9
	Indicated	1,408	11.1	3.6	0.46	156	2.6	11.6
	Inferred	5,844	17.5	5.7	0.37	173	2.3	9.1
	Total	**9,300**	**15.4**	**5.0**	**0.39**	**159**	**2.3**	**9.4**

Figures may not compute precisely due to rounding

Material classified as "Inaccessible Resources" (internal Zinifex classification) is not included in the above table. Mineral resources are inclusive of those resources modified to produce ore reserves.

Resource estimates are based on surveyed surface and underground diamond core holes. Data collection and verification procedures follow common industry standards, and AMC is satisfied that the data is of appropriate quality for resource/reserve estimation purposes.

There are two resource estimation techniques currently in operation, "traditional" and block modelling. Both employ lower cut-off parameters of 3m (true width) at $85 Total Metal Units ("TMU") ($65 for the potentially open pittable South Hercules prospect). P Lens is moderately sensitive to changes in cut-off grade whilst K Lens is less sensitive. TMU is a calculated unit based on metal prices and recoveries from mill feed to payable metal for lead, zinc, copper, silver and gold. In 2004 Rosebery plan to raise the cut-off to $125 TMU (new long term parameters). While this is not expected to have a material effect on the K Lens resource due to the high grade of the orebody and relatively sharp boundaries, the change may impact materially on the P Lens resource (see Section 2.1.6 for a comment on the likely effect on ore reserves).

The traditional resource estimation technique involves sectional interpretation based on geology and the $85 TMU cut-off, digitising, production of a wireframe model and averaging of all drillhole assays falling within the wireframe outline weighted for sample length. Historically this has worked well, but it is relatively inflexible and does not easily allow for variable cut-off grade assessment.

In early 2001 a block modelling technique, using 2m x 5m x 2m blocks and grade interpolation by ordinary kriging, was introduced for P and K Lenses, with results being cross-checked against the traditional technique. The method has been reasonably successful for K Lens with block modelling results being quoted in the March 2003 resource estimates (except for the Inferred Resources, which are based on the manual estimation procedure). The method has been less successful on P Lens due to its greater geological complexity and resource estimates for P Lens are currently based on block modelling for Upper P Lens and the traditional estimation technique for Lower P Lens.

Classification is based on drillhole spacing, although other parameters affecting confidence in estimation are also taken into account. Measured Resources are based on drillhole spacings of up to 25m and Indicated Resources on spacings of up to 40m. Inferred Resource is mineralisation of demonstrable continuity based on more than one drillhole.

Audits of the resource estimation process were undertaken by internal and external consultants in 1998 and 1999. AMC is satisfied that the material audit recommendations have been appropriately implemented.

Reconciliation records between ore reserves and mill production are limited, dating only from late 1999. In this period tonnage reconciliation has been good, while grade reconciliation has been of variable, though generally acceptable quality given the unavoidable limitations on accuracy imposed by the multiple ore sources and stockpiles.

In AMC's opinion, the resource estimates have been prepared in accordance with accepted industry standards and are based on exploration and sampling data of good quality. The estimates have been classified and reported appropriately in accordance with the JORC Code. The current low zinc price leads to the cut-off value of $85 TMU requiring more elevated zinc grades than in previous years, and, as previously noted, P Lens is relatively sensitive to changes in lower cut-off parameters.

Zinifex also maintains estimates of "Inaccessible Resources", a non-JORC compliant category that is not reported publicly. It covers potentially economic mineralisation, generally of lower grade than the mineral resources and located mainly in the upper levels of the mine, which is not currently accessible from existing mine workings, but which might become accessible in the future. The total tonnage of "Inaccessible Resources" is equivalent to approximately 25% of the tonnage of the mineral resources. AMC has not made a judgement as to the likely viability or otherwise of this material.

Total tonnes of mineral resources have been on a downtrend since 1998, due to both funding limitations and the cost/logistical challenges associated with deep drilling of the P, K and W Lens region (known as the "PKW Corridor"). Approximately $2M to $3M a year is required to be spent on resource-delineation drilling to keep pace with mine depletion and to extend mine life. The budget for 2004 is $1.0M and exploration has been on hold since April 2003, indicating that the downtrend in resources is likely to continue for the immediate future, with eventually important consequences for the operation.

While there is a substantial tonnage of resources in the upper areas of the mine (1.8 Mt), it is distributed amongst numerous small lenses and remnant mining blocks. While the resource estimates appear reasonable, the ability of this area to sustain continued production in the 120,000 tpa to 200,000 tpa range will depend mainly on issues related to costs of access and safe working practice.

4.2.1 Ore Reserves

Ore Reserves as at 31 March 2003 are listed in Table 15, the 2002 figures have been included for comparison.

Ore reserves are estimated by considering access and mineability issues and by applying mine dilution and recovery factors appropriate to the proposed mining method (cut and fill, bench stoping, uphole benching, crown pillar extraction or remnant stoping). Additional factors are also applied for ore in the Indicated Resource category. On average the reserve grade is 80% of the resource grade for all metals other than gold, which is 71%[1]. This is due to an additional mine call factor of 90% being applied to the gold grade based on mine-mill reconciliation. The average reserve tonnage is 96% of the resource tonnage. Development tonnes and grades are calculated separately.

It is AMC's opinion that the ore reserves are relatively insensitive to changes in metal price.

Table 15 Ore Reserve Estimates, Rosebery Mine, 31 March 2003

Year	Category	Tonnes (000t)	Zn (%)	Pb (%)	Cu (%)	Ag (g/t)	Au (g/t)	Fe (%)
2003	Proved	1,902	11.6	3.8	0.42	133	2.0	9.2
	Probable	388	16.5	4.5	0.38	150	2.1	9.7
	Total	**2,289**	**12.5**	**3.9**	**0.42**	**136**	**2.0**	**9.3**
2002	Proved	1,777	10.6	3.5	0.37	110	1.9	7.8
	Probable	549	13.0	3.7	0.66	116	2.0	13.8
	Total	**2,326**	**11.2**	**3.5**	**0.44**	**111**	**1.9**	**9.2**

In accordance with the JORC Code, no Inferred Resources are converted to ore reserves. "Inaccessible Resources" are likewise not converted to ore reserves.

In AMC's opinion the ore reserve estimates have been prepared in accordance with accepted industry standards and have been appropriately classified in accordance with the JORC Code.

The tonnage of ore reserves has been on a downtrend since 1997 mainly because of lack of underground development to provide drill sites for resource-reserve conversion and for testing the PKW Corridor and because of budget cut-backs. Continued timely development of the K decline and P decline is critical to keeping resource-reserve conversion in step with reserve depletion through mining.

For the purposes of life-of-mine planning, Rosebery makes internal estimates of "Estimated Economic Reserves" ("EER" – a term not covered by the JORC Code). These comprise:

- Proved and Probable Ore Reserves,

[1] Average percentages calculated by AMC from detailed source data provided by Rosebery

- minor amounts of Measured and Indicated Resources not included in the reserve and
- proportions of the Inferred Resources.

AMC is of the opinion that the tonnage and grade factors applied to convert Inferred Resource estimates to EER are conservative with respect to historical conversion rates.

The latest EER (31 October 2003) were estimated as:

5.3 Mt @ 3.5%Pb, 11.7%Zn, 0.34%Cu, 123g/t Ag, 1.7g/t Au

4.2.4 Exploration Potential

In the mine area, the main area of significant exploration potential is around and down-plunge of the PKW Corridor. It is likely that further drilling will delineate extensions to mineralisation in this zone, although the depth below surface and logistic/cost constraints may render economic exploitation challenging. In the remainder of the mine area, there is only minor potential for extensions to known mineralised lenses.

Zinifex has a reasonable tenement holding north, south and southwest of the mine lease. The tenements are mature in exploration terms, and, while there is potential for the discovery of small tonnages of mineralisation to supplement the mill, the prospects for a significant new discovery outside of the PKW Corridor on the mining lease appear remote. Regional exploration activities are currently only sufficient to maintain tenement status.

Should mining extend to approximately section 2400m N, 400m north of the current limit of the North Exploration Decline, production would be subject to a 5% net smelter return to other parties.

4.3 Mining

4.3.1 Mine Infrastructure

Rosebery uses mechanised underground mining methods (sub-level open stoping and benching with some cut-and-fill in the upper areas). Historically ore production has been around 0.5 Mtpa, however this has increased over the last three years to about 0.8 Mtpa currently.

Historically access and haulage has been by a network of rail haul-ways, internal shafts and declines that have been progressively developed as ore has been discovered at greater depths. In March 2003 a ramp connection to surface was completed and the shaft haulage system subsequently decommissioned. All ore is now trucked directly to surface.

The future operation will be concerned with the effects of depth – increased ground pressures, increasing ground temperature and a need for refrigeration. There are significant issues with respect to both ventilation and backfill. As the mine workings continue to extend to the north and to depth, and away from the primary ventilation shafts, ventilation is becoming a significant constraint on production. The increase in rock temperature with depth together with the recent

move to a diesel truck haulage system puts further pressure on the system. A transportable cooling plant has recently been installed underground in K lens which has improved the situation locally. AMC would expect that additional refrigerative cooling will be required as the workings extend to depth. Mine production is also significantly constrained by the availability of backfill. Backfill is limited to the placement of development waste as the infrastructure to place cemented wet fill is no longer serviceable. There are issues also with respect to the ability to tight fill against the shallow-dipping stope hangingwalls. The current limitations with respect to backfill can be managed by appropriate mine design but at the cost of ore being left in pillars and/or increased dilution.

A life-of-mine study is planned to be undertaken, by external consultants, early in 2004. This will address the current concerns with respect to ventilation and backfill.

4.3.2 Development and Production

The P and K lenses, which comprise the main current and future production areas, are characterised by a 40^{o} to 60^{o} dip which is difficult for underground mining because the blasted ore does not run freely and the orebody hanging wall is not competent (particularly in P lens). There is extreme variability in the configuration of the mineralisation along strike, down dip and across the mineralised zone in P lens, but less so in K lens. Seismic conditions mainly associated with the stresses occasioned from mining are generally low level.

The implications for mining are:

- small, narrow stopes;
- high development to stope ore ratios;
- small blasts because the holes close up within days of being drilled;
- high definitional drilling intensity;
- high dilution;
- difficult sequencing between closely adjacent stopes;
- ore losses associated with flat footwalls; and that
- about 40% of production needs to use less efficient remote mucking.

There is also a fine balance between sub-level interval (20m to 25m) and dilution control. In AMC's opinion consideration should be given to reducing the sub-level interval, particularly in the flatter dipping areas. All development waste is dumped back into empty stopes but often has to be double handled because of timing of fill location availability. These mining difficulties are offset to a degree by the high ore grades.

Cablebolting of the hanging wall is employed wherever possible, generally from an adjacent ore drive.

Stope development averages about six months ahead of production, however, there is virtually no buffer of production drilling due to the fact that holes do not stay open for more than a few days.

Development is scheduled at 400 m/month, although the mine is struggling to achieve this, averaging less than 350 m/month over the past year. Site management is addressing this issue and closely monitoring the development performance. AMC is of the opinion that the development targets should be comfortably achievable with the two development jumbos.

4.3.3 Scheduling

Rosebery planning staff maintain detailed production and activity schedules. There is excellent communication with production personnel who make every effort to follow the schedules as closely as possible. Currently there are five production areas, however this will drop to two areas in about 12 to 18 months time which will make the achievement of production targets increasingly difficult. Additional production areas (eg V Lens) are currently under consideration.

4.3.4 Mining Equipment

The primary production fleet comprises:

- 2 x AD55 Trucks
- 5 x AE40 Trucks
- 3 x R2900 LHDs
- 2 x Development Jumbos
- 1 x Simba Production Drill Rig

Most of the equipment is near new and in good condition. Replacement development and production jumbos and haul trucks have recently been commissioned. The standard of housekeeping underground is high with well maintained access ramps and workshop.

Installed pumping capacity is 85 litres/second. Water inflow is seasonal with a significant inflow from surface via old workings. During peak demand the pumps have been operating up to 16 hrs/day.

The mine electrical demand is supplied from a 6.6 kV feed taken down to 1000V or 415V. The mine is progressively upgrading to 1000V throughout.

4.4 Metallurgy

4.4.1 Process Description

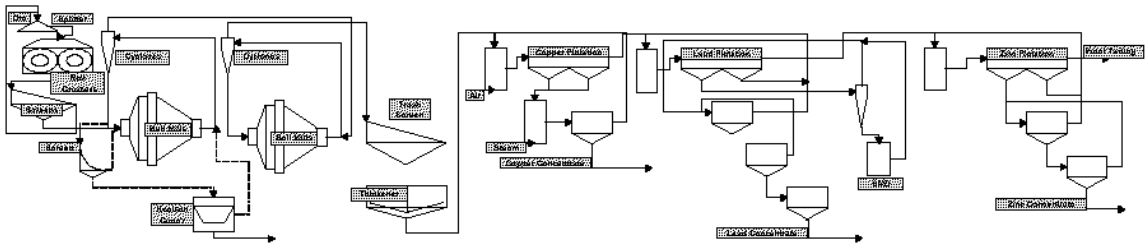
Minerals of economic interest include gold, chalcopyrite, galena, sphalerite and tetrahedrite. The dominant gangue mineral is pyrite, which must be actively depressed during flotation to achieve a high degree of selectivity. The production of three separate concentrates by sequential flotation adds to the complexity of the flotation process.

The process and equipment are generally quite conventional. The ore is trucked direct from the underground stopes to dump hoppers on the surface. A stockpile area is available for storage, for blending, for dealing with excess oversize and for trash sorting.

A grizzly and rock breaker is used for primary size reduction to minus 450 mm. The coarse ore received by the plant is crushed in two stages by a jaw crusher and a cone crusher. The fine ore, screened at 25 mm, is conveyed to the fine ore bins.

The fine ore is further crushed by roll crushers in parallel closed circuit with a 5 mm screen. This is followed by two stages of ball milling in series. The ball mill circuits are closed with cyclones. The grinding circuit product size has 80% of particles finer than 75 microns. A flowsheet for the grinding and flotation circuit is shown in Figure 8.

Figure 8 Zinifex Rosebery Mine – Process Flowsheet – Grinding and Flotation



Coarse free gold is recovered in the grinding circuit using a Knelson concentrator. Copper, lead and zinc are recovered sequentially by froth flotation. The copper concentrate is produced first and this contains a significant concentration of gold and silver. The precious metals constitute the bulk of the value of this product.

The lead concentrate is produced next and this concentrate also carries a significant amount of silver and, to a lesser extent, gold. One feature of the lead flotation circuit is the use of regrinding of rougher concentrate to improve liberation. The circuit uses a stirred media detritor ("SMD") because of the greater efficiency of this equipment. The lead circuit uses three stages of cleaning to produce the final concentrate.

The tailing from lead flotation is treated to recover the zinc. The zinc concentrate contains a small amount of gold and silver for which no payment is generally received by the mine. This treatment stage is entirely conventional and uses two stages of cleaning.

The three final concentrate slurries are pumped to the dewatering plant, located some distance from the main process plant. Thickeners and a combination of vacuum and pressure filters are used to remove water from the concentrate slurry. The filters discharge into storage bays in the lower level of the building. The concentrate is shipped by rail in covered wagons to a port facility in Burnie. The concentrate is unloaded by tippler and is stored at the wharf side, from where it is recovered by front end loader and conveyed to the ship loader.

The tailing from the flotation process flows to an effluent treatment plant where the slurry, mine water, site run-off and other effluent are treated with lime. The combined effluent is transported by pumps to a flume, through which the slurry flows to the Bobadil Tailing Disposal Facility ("TDF"). A pump station at the end of the flume delivers the slurry to the required pour point on the TDF perimeter. The water decanted from the tailing in the TDF flows through a holding pond before being discharged to the environment.

4.4.2 Process Performance

The process plant at Rosebery has a potential capacity of approximately 850,000 tpa however this rate has never been achieved. The recent history of ore treated and head grade is given in Table 16, together with present plans for 2004 to 2006.

Because of flotation and concentrate handling limitations, the current operating strategy targets a product rate and the tonnage of ore treated is varied as the head grade of ore from the mine changes. At lower grades, the limit to the tonnage treated is the capacity of the grinding circuit, in particular the capacity of the roll crushers to produce a suitable product size for the ball mill feed. The options available to improve this situation without significant capital expenditure are quite limited.

Table 16 Historical and Planned Ore Production – Rosebery Mine

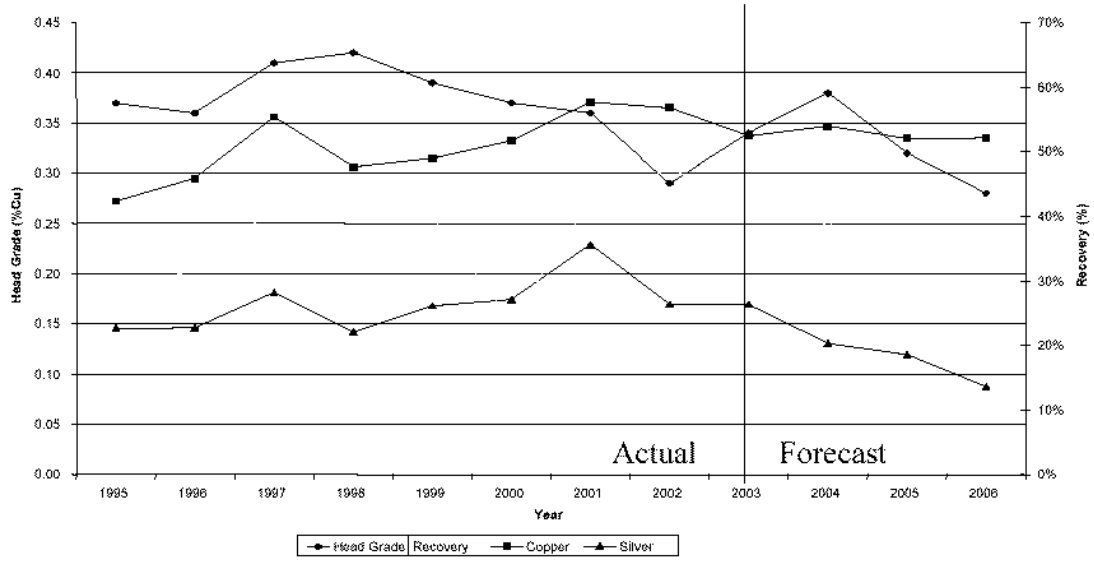
Year Ending	Ore Treated	Head Grade					
		Pb	Zn	Fe	Cu	Ag	Au
Actual	**t**	**%**	**%**	**%**	**%**	**g/t**	**g/t**
June 2000	633,222	4.35	12.11	10.39	0.37	129.96	1.84
June 2001	734,884	4.52	11.12	7.64	0.36	150.23	1.96
June 2002	755,629	3.88	11.45	6.72	0.29	129.02	1.80
June 2003	805,277	3.79	11.15	9.12	0.35	110.00	1.80
Planned	**t**	**%**	**%**	**%**	**%**	**g/t**	**g/t**
June 2004	787,400	4.2	12.22	9.42	0.39	128.00	1.92
June 2005	764,364	4.00	13.06	7.09	0.32	140.00	1.86
June 2006	733,486	3.81	12.52	6.61	0.28	118.00	1.73

Recovery of gold to doré has averaged 20% over the past five years and has been quite consistent. Recovery is difficult to predict because of difficulties in characterising the response of coarse gold in laboratory samples and because of unpredictable variations in the proportion of free gold in the ore. AMC's view is that gold recovery to doré will be maintained at historic levels.

Recoveries of copper, silver and gold to the copper concentrate have averaged 53.3%, 28.8% and 39.9% respectively over the last five years. The variations in actual and planned copper and silver recovery and copper head grade are shown in Figure 9.

The recovery of precious metals generally tracks that of the copper and is not subject to individual control. AMC's view is that copper recovery will be maintained at about historic levels despite projected variations in the copper head grade.

Figure 9 Recovery to Copper Concentrate

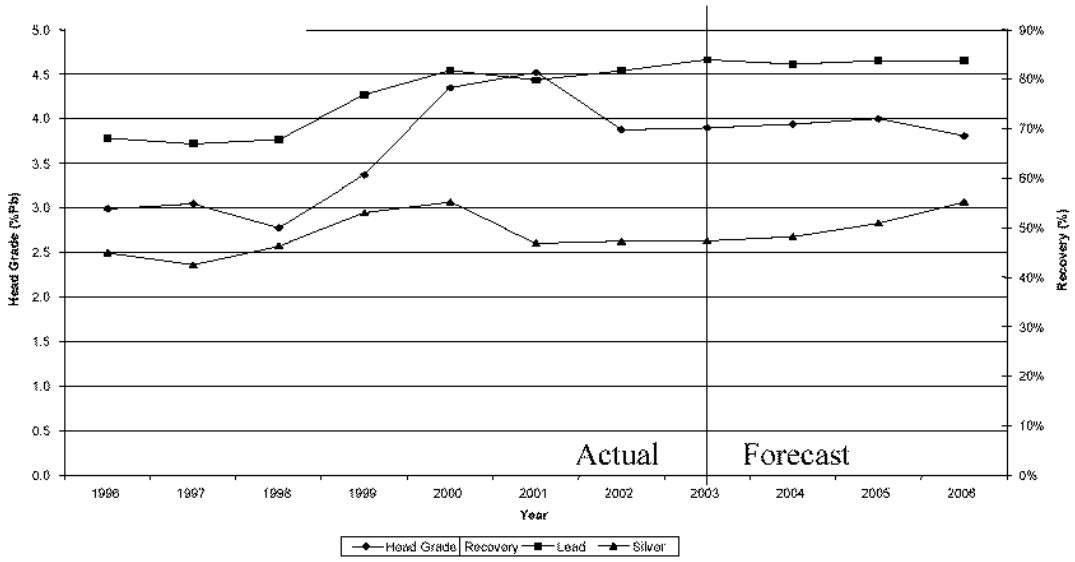


Recoveries of lead and silver to the lead concentrate have averaged 81.1% and 49.6% respectively over the past five years. The variations in actual and planned metal recovery and lead head grade are shown in Figure 10.

Recovery of lead to lead concentrate is not strongly influenced by the head grade of the ore being treated. Recent changes to the operating strategy have focussed on higher lead recovery as part of an integrated approach to revenue enhancement with other mines and smelters within the group.

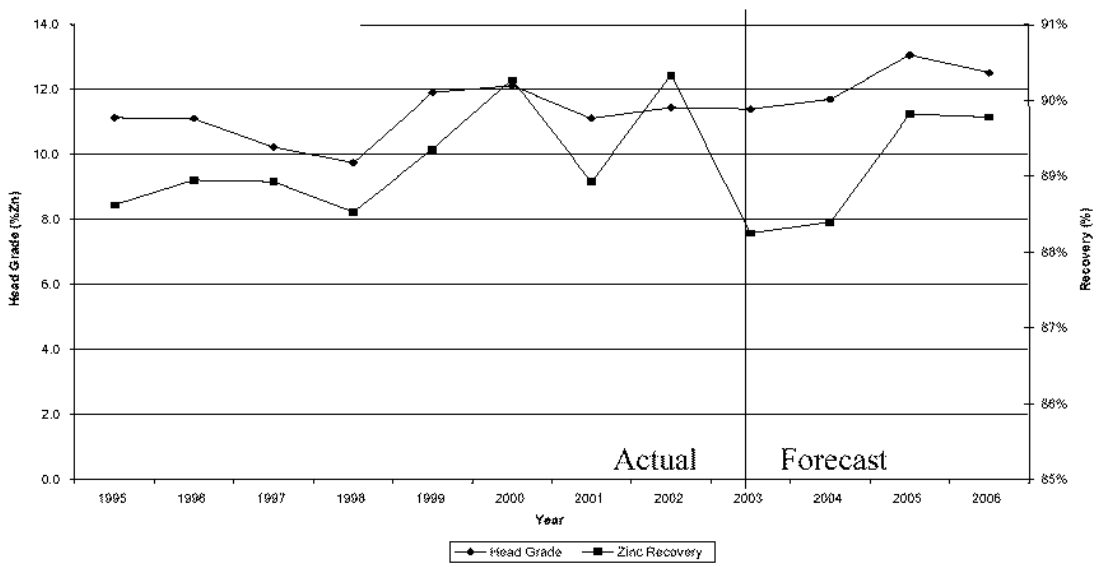
The recovery of silver tends to follow that of lead due to the intimate association between silver and lead.

Figure 10 Recovery to Lead Concentrate



Recovery of zinc to the zinc concentrate has averaged 89.4% over the past five years. The variations in actual and planned recovery and zinc head grade are shown in Figure 11. Recovery of zinc is more strongly affected by variations in the head grade of ore treated.

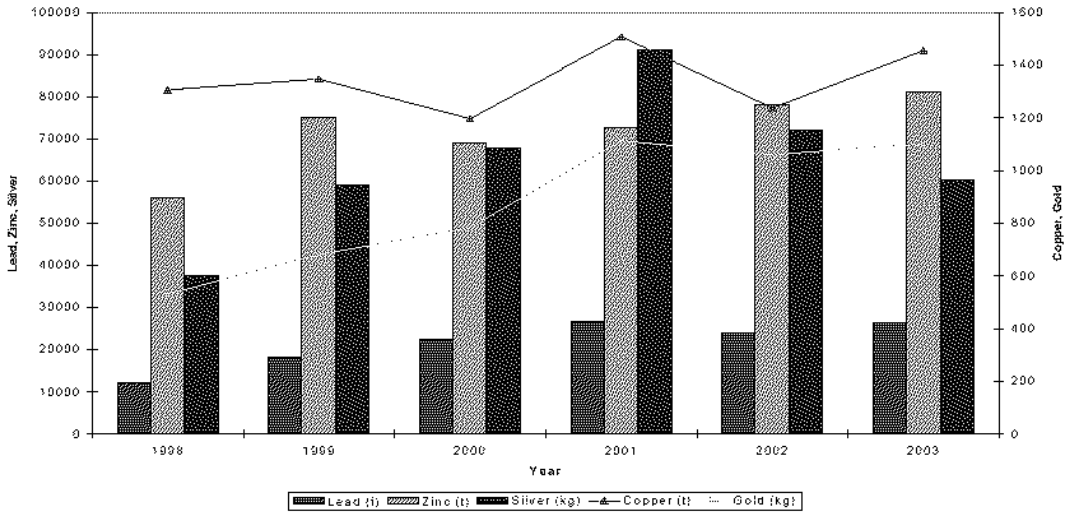
Figure 11 Recovery to Zinc Concentrate



The flotation capacity of the circuit is such that, at the Long Term Plan ore grades, there is no physical limit affecting metallurgical performance. However, for lead head grade above 5.0% and for zinc above 15.0%, the ore treatment rate has to be reduced to avoid either excessive metal losses or unacceptably high impurities in concentrate.

The annual production of payable copper, lead, zinc, silver and gold in doré and concentrate over the past six years is shown in Figure 12.

Figure 12 Metal Production



The Long Term Plan predicts that the copper metal production from the mine will decrease by 9% on average compared to the most recent production year because of the reduction in ore treated and the forecast changes in the copper head grade. AMC's view is that the target copper concentrate grade might not be achieved, but it is unlikely to have a material effect on the value of the product to the operation.

For similar reasons to those for the copper, the production of lead to payable concentrate is expected to decrease by 5% over the next three years.

The Long Term Plan predicts an increase in the production of zinc to zinc concentrate of 5%, largely due to the planned increase in grade of ore treated. The tonnage treated will be reduced to maintain the planned zinc metal production. AMC's view is that the Long Term Plan metallurgical performance is achievable. AMC does note that recent ore feed has controlled iron by scheduling and blending, and a return to higher iron mineralogy could impact on zinc flotation performance.

The production of silver and gold to doré and payable concentrates is forecast to change by 14% and -2.5% respectively in the three years to 2006. This change is due to changes in head grade and ore treatment rates. Rosebery is placing greater emphasis on the investigation of silver and gold recovery and a trial of high intensity cyanidation of Knelson concentrate is planned. AMC considers that the chance of improving overall gold recovery significantly is quite low. The main effect is most likely to reduce the gold in copper and lead concentrate and the principal benefit will be to achieve earlier cash flow.

In AMC's view, with the exception of the issues discussed below, the condition of the plant and equipment at Rosebery is generally good for the type and age of the operation. The plant layout

is quite cramped in some sections due to the limited footprint available and the evolution of the process flowsheet over the life of the mine.

The process control system in the plant has been developed piecemeal and consists of a collection of obsolete and sometimes incompatible systems. The equipment used for reagent dosing is not satisfactory. Rosebery has planned improvements to the plant process control system.

The use of vacuum filters and steam heating for part of the production results in relatively higher operating costs and higher filter cake moisture. Rosebery is addressing this aspect by the installation of pressure filters.

The use of a flume for tailing transport is unusual but it is highly flexible in dealing with the varying flows of site and mine water and town effluent. A remote pumping station at the end of the flume is required to fully utilise the capacity of the current TDF.

The Rosebery concentrator is manned by a combination of staff, award and contract labour. The manning levels are consistent with operations of similar size and complexity. The Long Term Plan average operating cost of just over $20 /t treated is also consistent with comparable operations. Approximately 40% of the operating cost is for tonnage related costs such as energy and consumables.

4.5 Ex-mine Transport and Handling

All concentrate is railed under contract to the port of Burnie for loading onto ocean going bulk carriers. All zinc and lead concentrate is transferred to Zinifex smelters, particularly Hobart and Port Pirie. All copper concentrate is sold externally. A number of options for concentrate transport are under consideration including direct rail/road to Hobart.

4.6 Infrastructure and Services

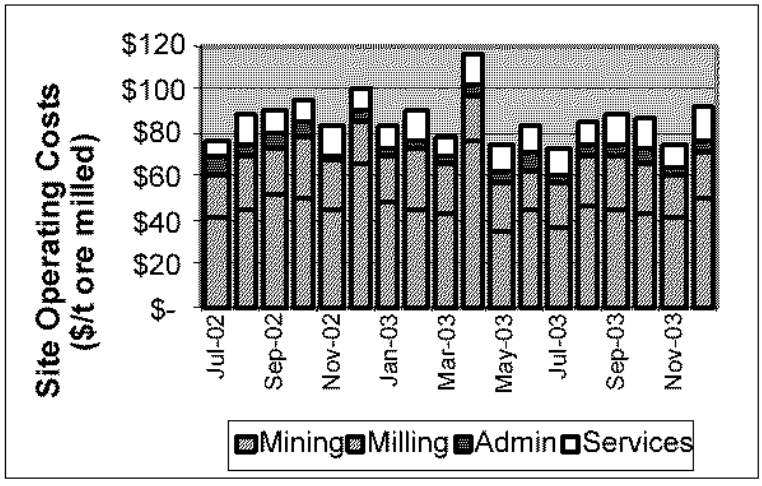
Electricity, water and road services are provided by Tasmanian public networks. A private contractor owns and operates the railway to Burnie and the storage and ship loading facility at that port.

The mine workforce is accommodated in Rosebery, Zeehan and other regional towns. Rosebery is well located with respect to industrial infrastructure. It has access to relatively cheap power and has a plentiful water supply. Rosebery provides housing accommodation for about 20% of its employees.

4.7 Operating and Capital Cost Estimates

The graph below shows the recent site operating cost performance. These costs include all mine development including capital.

Figure 13 Historical Site Operating Costs



In March/April 2003 the operation changed from ore hoisting to truck haulage.

Table 17 summarises the Long Term Plan site operating cost estimates.

Table 17 Forecast Site Operating Cost Estimates

	Unit	2004	2005	Ave 2006-2010
Mining inc Mine Devt.	$/t ore	$42.20	$49.70	$44.00
Milling	$/t ore	$20.70	$22.50	$23.50
Admin & Services	$/t ore	$14.20	$17.70	$18.20
Total Operating Costs	**$/t ore**	**$77.00**	**$89.90**	**$85.70**

The reduction in operating costs in the final years of the Long Term Plan reflects a reduction in mine development. If additional ore is found at depth then further mine development will be required and cost estimates would be expected to increase.

Forecast capital expenditure is summarised in Table 18.

Table 18 Forecast Capital Expenditure Estimates ($M)

Category	Year		
	2004	2005	2006
Mine Exploration	1.5	3.0	2.0
Mine Development	9.0	10.4	8.1
Mine Replacement Mobile Equipment	1.6	3.1	3.25
Mine Ventilation Upgrade	0.1	4.2	1.5
Mine Other	1.0	1.9	0.8
Mill Process	-	3.3	1.4
Mill Tailings	1.0	1.1	-
Mill Concentrate Handling	0.6	0.6	-
Environmental, Safety, Other	0.6	1.4	0.75
Total	**15.5**	**29.0**	**17.8**

An additional $30M capital is forecast to be spent over the last four years of the plan from 2007 to 2010.

4.8 Environmental Impact, Protection and Rehabilitation Issues

These issues have not been reviewed by AMC.

4.9 Management and Workforce

Workforce numbers at Rosebery have decreased substantially during recent years. Rosebery operates within a Consent Agreement with the AWU, CEPU and AMWU unions. Employees work for a four-day on/four-day off, 42 hours per week roster.

There is concern over the turnover of professional staff, however this is perhaps more of an industry wide, rather than site specific, issue.

OHS features as a priority in the management reports and is covered extensively. By observation there were no obvious safety hazards or poor practices and the general standard of housekeeping, both on surface and underground, is commendable.

The workforce, particularly in the processing plant, is stable and mature. The downside to the aging workforce is increasing levels of sick leave. The current lost time accident and incident statistics compare well with industry levels for an underground operation.

At each operation there is a latent concern with lead ingestion, although the risks are not overly high because of the wet beneficiation process. Protection against dust inhalation is provided underground and in the concentrate handling. Blood lead levels are routinely checked.

4.10 Production Economics, Risks and Opportunities

Key performance indicators and estimated unit costs for the Two Year Forecast period 2004 to 2005 are shown in Table 19. These summary data have been compiled by AMC from data provided by Zinifex.

Mine production forecasts for 2004 and 2005 are in line with AMC's expectations and the grades consistent with the 2003 Annual Resource/Reserve Statement. The Long Term Plan shows a mine life of seven years with total mine production which is materially consistent with the EER and is:

5.3 Mt @ 3.6%Pb, 11.6% Zn, 0.3% Cu, 123 g/t Ag, 1.8 g/t Au

The production rate over the Long Term Plan is nominally 0.76 Mtpa. While AMC believes this is achievable in the short term it will become increasingly difficult to maintain this rate as the number of production areas reduces and mining extends to depth.

Table 19 Key Performance Indicators for Rosebery Mine

Performance Indicator		Unit	Forecast Years		Average Two Forecast Years
			2004	2005	
Mining					
Ore Mined		000 t	801	764	783
Processing					
Annual ore milling rate		000 t	787	764	776
Average head grade:	zinc	%	12.2	13.1	12.6
	lead	%	4.2	4.0	4.1
	copper	%	0.38	0.32	0.3
	silver	g/t	126	140	133
	gold	g/t	2.0	1.9	1.9
Recovery to primary concentrate:	zinc	%	87,9	89.8	88.8
	lead	%	83.5	83.8	83.6
	copper	%	54.6	52.1	53.3
Concentrate grade:	zinc	% (Zn)	56.8	57.1	56.9
	lead	% (Pb)	63.5	63.0	63.3
	copper	% (Cu)	21.4	23.0	22.2
Metal production in primary concentrates/gold dore[3]	zinc	000t Zn	81.4	89.6	85.5
	lead	000t Pb	26.9	25.6	26.3
	copper	000t Cu	1.65	1.26	1.46
	gold	kg	1.107	1,102	1,104
	silver	kg	74,791	74,645	74,718
Operating Economics					
Total annual cash operating costs[1]		$ Mpa	62.3	68.0	65.1
Mine Development Capital		$ Mpa	9.0	10.4	9.7

Notes:
1. Stated costs shown include mine development capital and exclude redistributed head office costs and royalties.
2. 2004 data taken from actuals to 31 December 2003 and short term model forecast numbers for January to June 2004.
3. Zinc in zinc concentrate, lead in lead concentrate, copper in copper concentrate, silver and gold in lead and copper concentrates and doré.

In AMC's view the main factors that characterise economic performance at Rosebery are:

- *High value of ore.* In addition to its medium-to-high grades of zinc, lead and silver, Rosebery ore has valuable gold and copper content.

- *High mining costs.* The unit mining costs are high, primarily because of the low production rate and the proportional impact of fixed costs. Trucking costs are high because of the depth below surface.

- *Good metallurgical response.* Notwithstanding separation of gold to doré and production of three metal concentrates in a complex facility, around 90% of zinc, 81% of lead and 84% of gold and silver are recoverable into saleable concentrates. Overall, almost 90% of contained metal value in milled ore is recovered into concentrates.

- *Relatively low product realisation costs.* All of Rosebery's concentrates except copper are consumed by Zinifex at Hobart and Port Pirie. With a direct rail connection to the port of Burnie and use of Zinifex's chartered bulk carrier, all of these concentrates can be

delivered efficiently to market. Furthermore, being of relatively high-grade, Rosebery concentrates incur lesser realisation imposts through smelter treatment charges. Overall, almost 48% of metal value in ore is realised for the mine.

- *New underground equipment fleet.* A number of underground mobile equipment units have been replaced over recent months including development jumbos and trucks. Allowance for two more of the AE40 trucks and an R2900 loader has been made in the capital expenditure plan over the next two years. The AE40 truck fleet is progressively being replaced with larger AD/E55 units.

- *Good systems and procedures.* Rosebery is a well established site has a stable and experienced award workforce, good systems and procedures in place and with established infrastructure and services.

There are a number of issues which may have an impact on the future economic performance. These are mainly concerned with reserve depletion and mining from increased depth.

- *Short mine life.* The current mine plan assumes closure in 2010 due to ore depletion. Although there is a reasonable expectation that additional ore will be found at depth the limited life makes it difficult to justify any significant spending on mine infrastructure.

- *Backfill.* Currently backfill is restricted to the placement of development waste with limited suitable fill material available on surface. Sourcing sufficient backfill material could become a problem later in the mine life.

- *Production Rates.* Sustaining production rates will become increasingly difficult as the mine gets deeper and the number of independent production areas diminishes. Ore haulage distances will increase as will ambient rock temperatures and rock stresses. AMC considers these issues to be manageable with appropriate mine design and by maintaining the strong focus on scheduling.

- *Professional Staff.* The retention of professional staff is becoming an issue for management. This is more an industry wide concern than site specific.

- *Mature workforce.* The ageing award workforce, whilst stable and experienced, also has increasing health issues and associated time off work.

- *Historical mining.* There is an environmental legacy associated with the previous mining in the area requiring a significant provision for site cleanup and closure costs.

Rosebery plans to undertake a Life-of-Mine/Mining Strategy study early in 2004 to update the mine plan and resolve the mining issues noted above.

The most significant opportunity for Rosebery is an extension of mine life beyond the current mine plan. Given the history of the operation there would be a reasonable expectation that this would occur.

5 DUGALD RIVER ZINC-LEAD PROJECT

5.1 Background and Geology

The Dugald River deposit is about 50 km north east of Mt Isa in Queensland (Figure 2). A stratiform zinc-lead-silver sulphide body is hosted by black slates in a sequence of Proterozoic metasediments which strikes north south and is disrupted by sub-parallel shearing. The deposit dips at around 70° to near vertical to the west near surface and generally flattens with depth to around 50° to the west.

The deposit is approximately 2 km long with an average width of 10m and has been drilled from surface to more than 1000m depth. Mineralisation above cut-off grade is not continuous. Outside of the resource, there is potential for additional mineralisation which is thought to be generally of lower grade but exploration upside is considered limited.

Access to the area is good. A water supply pipeline from Mt Isa to Ernest Henry passes close to Dugald River. Power is available from an existing grid. Access for mine infrastructure such as tailings dams could require an agreement with adjacent title holders. Native title claims impact on exploration titles but not on mining and mining development leases over the deposit. A series of environmental studies indicate no major issues.

5.2 Resources and Reserves

Table 20 Dugald River, Mineral Resource at 31 March 2002

Classification	Mt	% Zn	% Pb	g/t Ag
Indicated	31.9	12.6	2.0	44
Inferred	16.0	11.1	2.3	44
Total	47.9	12.1	2.1	44

The resource estimate is based mainly on diamond drilling at spacings of 50m or less near surface and 100m or more below a depth of 300m. Resource estimates are inclusive of internal dilution up to 3m. Independent reviews of the database have generally considered it satisfactory although some assay bias and significant deviation of some of the drill holes have been noted. The overall drill density is low and AMC thinks that the percentage of mineralisation classified as Indicated Resource is too high.

The resource in Table 20 uses a cut-off grade of 10% Zn plus Pb. In AMC's view that cut-off is reasonable.

Resource tonnages are sensitive to changes in cut-off grade enabling consideration of smaller tonnages at higher grade as well as vice versa. For example, a 1992 study using a minimum block average of 15% Zn equivalent produced a resource to a depth of 600m of 13.7 Mt at 14.2% Zn, 2.2% Pb and 77 g/t Ag.

Most resource estimates have used polygonal techniques although tests using other approaches, including inverse distance squared and kriging, produced results of similar order. The current

estimate uses ordinary kriging within a wire framed block model with an approximate 15% sulphide external boundary to the resource.

Numerous mining and prefeasibility studies using resources at different cut-off grades and to different depths have applied mining factors to produce potentially mineable tonnages, generally in similar order to the resources but at a lower grade. Because the deposit is presently sub-economic, no such estimate can be described as an Ore Reserve.

5.3 Mining

Most recent studies have considered limited open pit mining of the near surface parts of the deposit while commencing a decline to access the deposit to around 600m depth. Some studies allow shaft access beyond that depth.

Some studies postulate a combination of open stoping and other methods for underground mining depending on the width of the mineralisation. Others assume cut and fill methods

Production rates considered vary from 0.4 Mtpa to 2.3 Mtpa.

5.4 Processing

Most recent work suggests that it is reasonable to expect a zinc recovery into concentrate of more than 80% with concentrate grades in the order of 50% Zn or better. Recoveries of lead and silver are relatively low.

The mineralisation contains about 10% iron and a high manganese content. It would produce a concentrate in excess of 2% Mn. Other contaminants in the potential concentrate are silica and organic carbon. High manganese concentrates can be accepted by Imperial Smelting Furnace ("ISF") smelters but there is a dwindling number of these. Small amounts can also be blended as feed to an electrolytic smelter.

Studies aimed at resolving the difficult metallurgy have considered alternatives such as smelting at site, fuming at site, production of metal oxides and recovery of zinc by leaching. Most studies have concluded that the most appropriate processing route remains the production of concentrate on site and transport to a treatment facility. Recently, Zinifex has considered fine grinding as well as inhouse process developments in smelting (at Port Pirie) and in on-site hydrometallurgy. Based on pilot plant work for a high manganese zinc ore in South Africa, it is also considering an electrolytic process to remove Mn prior to smelting. However no commercially proven process to achieve a satisfactory product is yet available.

5.5 Economics

The unattractive economics of producing and transporting a product to market at recent zinc prices and the limited acceptability of the product to the market maintain Dugald River as a sub economic deposit.

Most studies have resulted in unacceptably low returns at then prevailing zinc prices and exchange rates. The most recent study has been by AMC which considered a mineable tonnage of 52.6 Mt at 10.5% Zn, 1.6% Pb, 32 g/t Au, production at rates up to 2.3 Mtpa and zinc

recovery of 80%. This scenario was not economic at a zinc price of US$0.54 per pound and an exchange rate of A$=US$0.71.

Transport costs to a concentrate treatment site (or alternatively, an ore treatment site such as Century) are a major factor in the economics. There has been some consideration of a slurry pipeline to Karumba and that raises the possibility of a joint operation with Century.

In AMC's opinion, key factors in the possible future of an operation at Dugald River are

- Improvement in the zinc price in Australian dollar terms.
- Identifying a concentrate treatment process and facility which could provide an adequate and secure market for Dugald River product, either by itself or as a blend with other concentrates.
- Improvements in the economics of mining, concentrating and transport including optimisation of a potential mining operation in regard to cut-off grade, scheduling and production rate as well as improvements in metallurgical recovery and concentrate grade.

The most comprehensive economic studies are fairly old. There may be scope, at higher zinc prices, to reconsider the optimisation of a potential operation addressing the issues discussed above, particularly given advances in mining efficiency and economics, the possibility of improvements in metallurgy and the possibility of blending with Century ore or concentrate.

6 INTRODUCTION TO SMELTERS

This section discusses the linkage between Zinifex's mines and smelters, describes the basic smelting process, compares performance at the different smelters and discusses group wide personnel and technical support issues. Later sections describe and assess each of the smelters in more detail.

The data in the various projections in this and later smelter sections are consistent with the Two Year Forecast and the Long Term Plan.

6.1 Mine and Smelter Linkages

The Zinifex mines and smelters are strongly integrated in terms of material flows. Figure 1 in Section 1 shows lead and zinc concentrate flows in 2004. At present some 40% of Century zinc concentrate is sold outside the group. This will progressively decrease to 39% in 2005 and subsequently to around 13% as Hobart increases its treatment of Century zinc concentrate to 70% of concentrate inputs. While a relatively small tonnage of Century zinc concentrate goes to Clarksville, AMC considers this reasonable, as feed from Central and South America has lower transport charges. The geographic proximity of the two Australian smelters to Broken Hill, Rosebery and Endeavour (formerly Elura) provides a location benefit.

The linkage of smelters by residue and by-product flows is important. Following closure of the Cockle Creek smelter in New South Wales, Port Pirie's role as a residue smelter remains one of the important strengths of the group.

Zinifex has evaluated possible treatment routes for Port Pirie zinc oxide fume, but it is likely that economic zinc metal production will continue there, despite its small scale zinc plant. AMC considers that provision of surplus zinc oxide from Port Pirie to Hobart and Budel could become attractive.

6.2 Smelter Operations

Zinifex operates four smelters. These are:

- Zinifex Budel Zink ("Budel") in The Netherlands
- Zinifex Clarksville Zinc ("Clarksville") in Tennessee, USA
- Zinifex Hobart Smelter ("Hobart") in Tasmania
- Zinifex Port Pirie Smelter ("Port Pirie") in South Australia

6.2.1 RLE Smelters (Budel, Hobart and Clarksville)

Roast-leach-electrowin ("RLE") is the process which produces about 90% of refined zinc worldwide.

Roasting

Zinc sulphide concentrate feed is oxidized or roasted at high temperature to make an impure zinc oxide called calcine. Roasting is done in a fluidised bed furnace or roaster at a temperature of about 950°C. Sulphur in the concentrate produces sulphur dioxide in a gas stream, from which sulphuric acid is made. Some sulphates are also formed, and there is some residual unoxidised sulphide in the calcine. Iron in the concentrates forms zinc ferrites, and some silica may form silicates.

The production capacity of all three RLE smelters is limited by their roaster-acid plant. This limitation can be overcome to some extent by feeding secondary zinc oxides to the roaster. In plant trials at Budel and Clarksville, zinc oxides were successfully fed at 10% and 7% of charge, respectively. The halides (particularly chlorides) present in the zinc oxides posed no problem, being largely eliminated in the roaster gas stream. Processing of oxides at much higher rates than so far tried could require additional metallurgical steps to be taken to cope with halides.

Leaching

The calcine is leached or largely dissolved by sulphuric acid in stages to form an impure solution of zinc sulphate. The first stage is very mildly acidic and is termed the neutral leach ("NL"); the second stage is more aggressive with higher acidity and temperature to increase zinc recovery to solution. Neutralisation of the acidic solution is carefully controlled to form the desired type of

residue. The residue includes gangue, particularly iron and silica, together with lead, other impurities and some zinc. It may be stored or further processed for metal recovery. Liquors from these later stages recycle to NL. The impure NL zinc sulphate solution is purified, normally in two stages with the addition of zinc dust and other materials. Residues or 'cakes' from purification contain valuable metals such as copper, cadmium and nickel, and are further processed before sale.

Electrowinning

Zinc in the purified solution is then 'won' by electrolysis as cathode zinc. This stage lowers the zinc level in electrolyte while increasing its acidity, to discharge as "spent electrolyte" for return to leaching. The cathode zinc is melted and cast for sale, some being used to make zinc dust for use in solution purification.

RLE zinc plants are substantially fixed cost operations, apart from power used in electrolysis. Hence incremental expansion of capacity is generally economically rewarding. All three RLE plants plus the Port Pirie zinc plant plan to increase zinc production above their 2004 levels during the years to 2008.

6.2.2 Port Pirie Lead Smelter

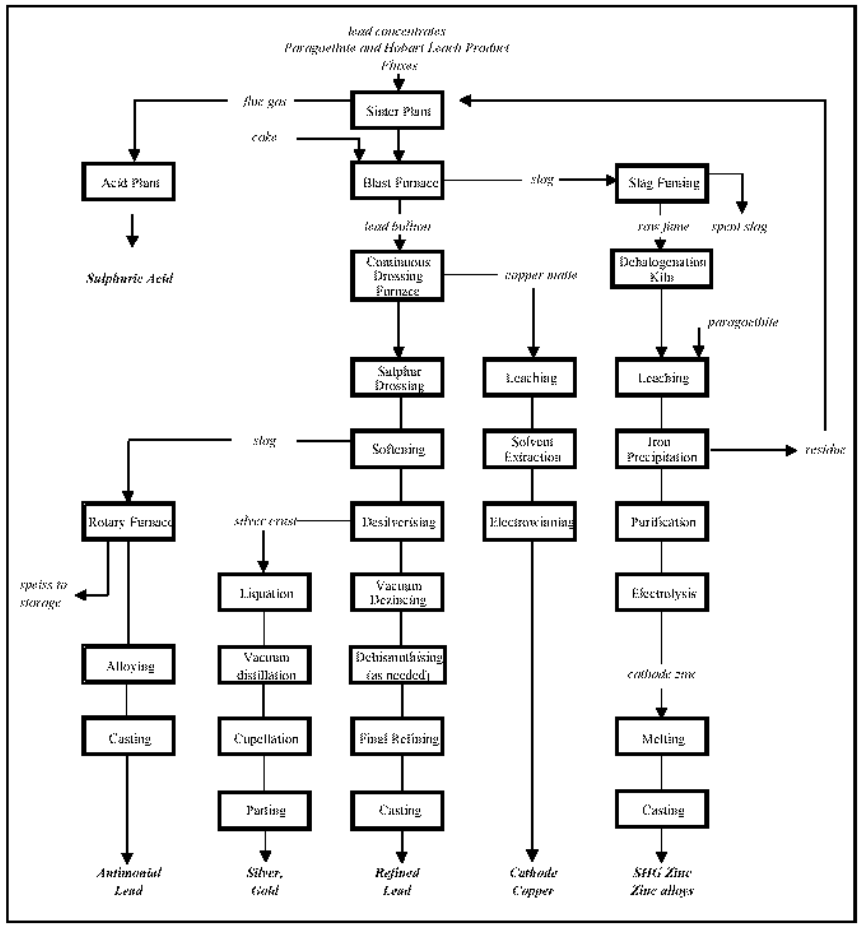
Lead sulphide concentrates are sintered at high temperature on a machine that performs both oxidation and agglomeration into a lump form or sinter; sulphur is oxidised to sulphur dioxide in a gas stream that is cleaned and processed to make sulphuric acid. The sinter and coke are charged to a lead blast furnace that produces a crude lead bullion and slag. The lead bullion is then refined in multiple steps to remove impurities including copper, arsenic, antimony, bismuth, silver and gold. Metallic copper is then produced in a process involving leaching, solvent extraction and electrowinning. Silver and gold are produced as refined and semi-refined products, respectively. The blast furnace slag is 'fumed' in a pyrometallurgical process to recover zinc and lead as impure oxides. These oxides are then processed by leaching, solution purification and electrowinning to make market zinc metal, in a manner much the same as with the RLE process.

The three Zinifex RLE plants, and the Port Pirie zinc plant after its slag fuming stage, use nominally the same leach and electrowin technology. However there are substantial differences between the plants, arising from different feed materials, their historical evolution, their locations and scale of operation.

In succeeding sections of this report, each plant is described in detail to provide an understanding of these differences that have a significant effect on their metallurgical performance and their operating costs.

Plant operating costs, excluding raw material feed costs (mainly for sulphide concentrates), are termed conversion costs. Unit production costs, or the costs per tonne of market metal including feed and conversion costs, are discussed so that the smelter performance can be judged against the metal price.

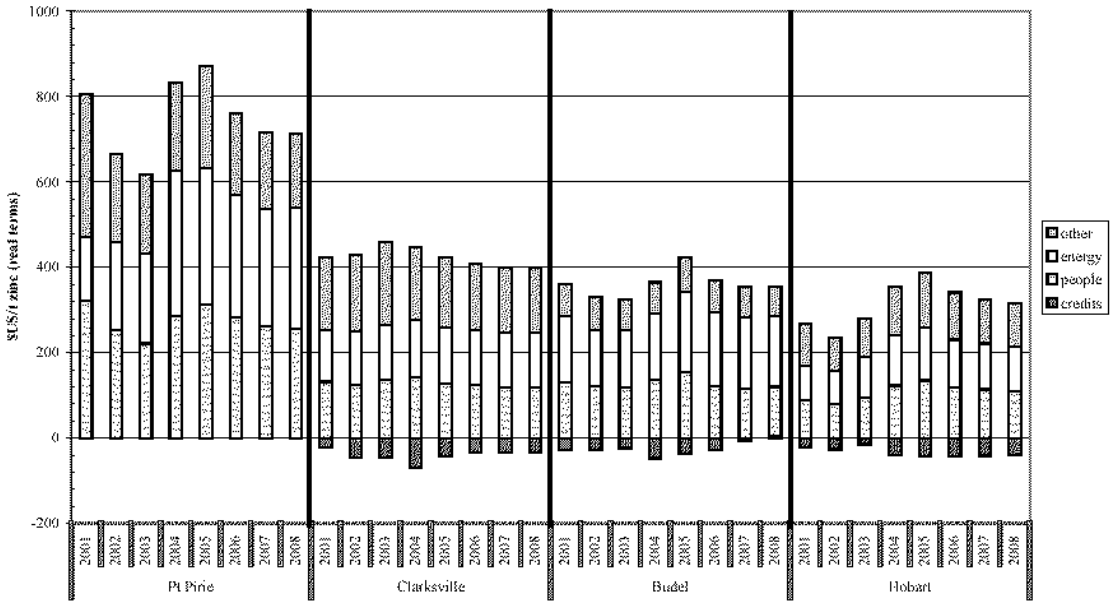
Figure 14 Port Pirie Simplified Flowsheet



6.3 Smelter Performance Comparisons

Figures 15 and 16 compare the four Zinifex zinc smelters in terms of actual and forecast unit conversion costs after by-product credits, and unit total production costs including raw material feeds. The projected costs are consistent with the Two Year Forecast for 2004 and 2005 and with the Long Term Plan

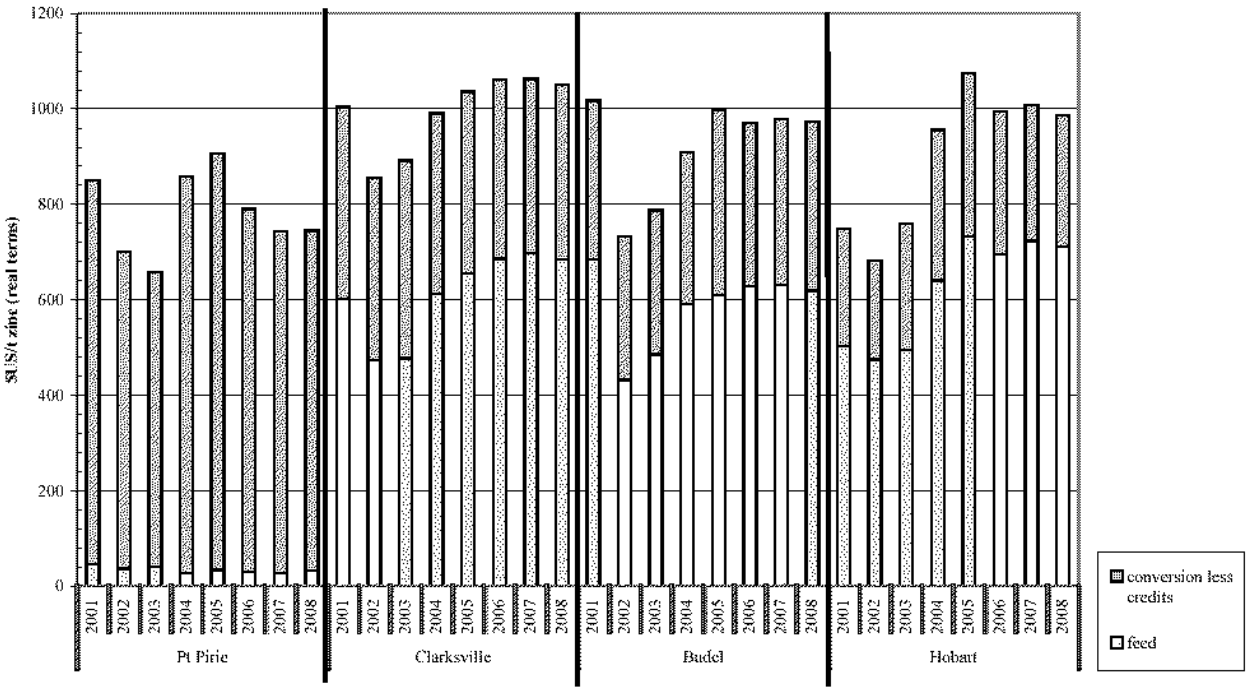
Figure 15 Zinifex Smelters Unit Conversion Costs, $US/t Zinc



Metal prices and forecasts inherent in the calculations relevant to this figure and to Figures 16 and 17 have been provided to AMC by Zinifex and are consistent with those listed in Table 3 and elsewhere in this IOM.

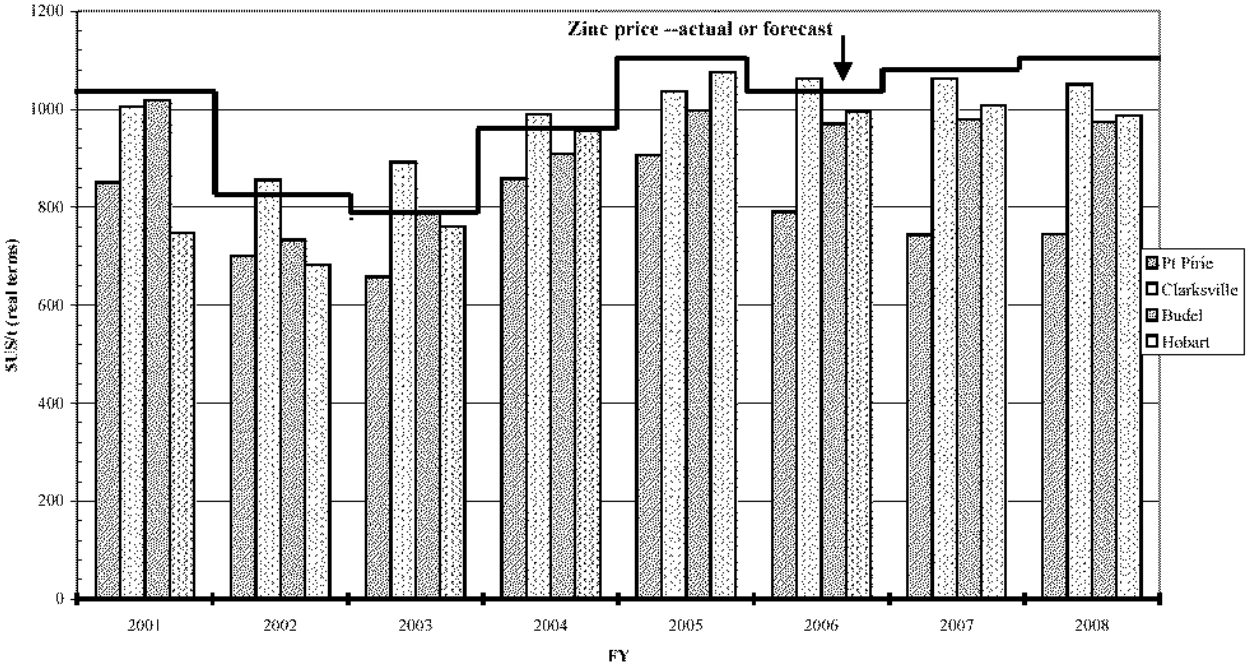
The high zinc conversion cost of Port Pirie represents most of its total production cost, because its feed, lead blast furnace slag, is taken as zero cost. Only a small cost is incurred for zinc-bearing feeds. On this basis, Port Pirie unit zinc production cost becomes the lowest cost smelter. The forecast increases in feed costs in 2005 to 2008 for Clarksville, Budel and Hobart result from a forecast higher LME zinc price. As the total zinc production cost at Port Pirie remains independent of zinc price, its relative cost performance improves significantly as the zinc price increases. However, unit conversion costs are forecast to decrease in 2006 to 2008, particularly through increases in production.

Figure 16 Zinifex Smelters Unit Production Cost



In US dollar terms, the forecast relative performance of each smelter against zinc price (Figure 17) depends also significantly on forecast exchange rates because most of the conversion costs, except for Clarksville, are not in US dollars.

Figure 17 Zinifex Smelters Cost Comparison



The zinc price shown in Figure 17 is the Zinifex long term forecast for the LME price and does not take into account any market premiums or market realisation costs.

Other comparative key performance indicators for 2003 are given in Table 21.

Table 21 Actual Key Performance Indicators for 2003

Key Performance Parameter	Hobart Zinc	Clarksville Zinc	Budel Zinc	Port Pirie Zinc	Port Pirie Lead
Market Metal Production t	253,500	110,200	212,100	43,000	267,500
Employees + contractors	632	278	480	316	509
Productivity, t/man-year	401	396	437	136	526
Power cost index Hobart = 100	100	188	212	240	
Average Employee cost A$/man-year	73,000	98,000	89,000	64,000	64,000
Roaster utilisation %	93.5	92.4	92.6	na	na
Current efficiency %	90.9	91.1	92.5	87.0	na
Electrolysis Power, kWh/t cathode zinc	3,350	3,165	3,116	3,470	na
Overall Zn recovery %	91.4	95.8	98.2	89.0	na
MRIFR[3]	64	35	22		43[2]
Workers with lead in blood > 30 µg/dL at 30 June	2	0	1		130[2]

Notes:
1. Employees numbers and costs in Port Pirie support departments are allocated to lead and zinc pro-rata to direct operating costs
2. Port Pirie numbers are for the whole site
3. Medically Referred Injury Frequency Rate, per million man hours

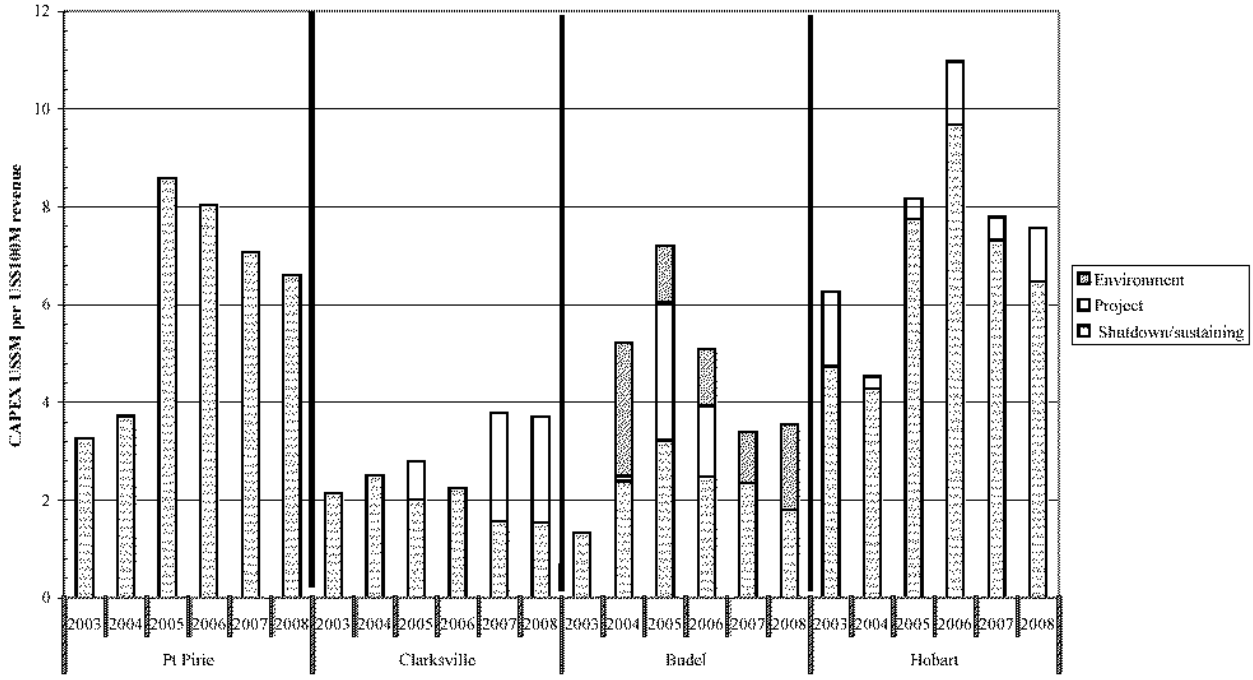
Whilst productivity per employee is excellent at Clarksville and Budel, the advantage is reduced through high employee costs in Australian dollar terms. At Port Pirie, direct productivity in zinc production is 240 t/man-year, but is significantly reduced when proportional support department numbers are allocated. Clarksville, Budel and Port Pirie all suffer from high power costs. Together, these factors have a major effect on conversion costs of the plants.

In treating low iron concentrates, both Clarksville and Budel achieve good metallurgical performance in terms of zinc recovery and current efficiency and power usage in electrolysis. Hobart achieves quite good current efficiency, but its high power consumption reflects its cell operations in terms of current efficiency and current density. AMC considers the low Hobart zinc recovery, caused by its production of paragoethite, to be a concern, but recognises that zinc in Paragoethite Product ("PGP") is largely recovered at Port Pirie. Hobart zinc recovery should improve when Hobart increases treatment of Century concentrate to 70% of feed. The zinc loss at Port Pirie is in slag fuming tail slag. The limitations of the small cell-house operating at high current density result in its relatively poor (but improving) electrical performance.

Safety performance continues to improve in all smelters and receives high priority. With worker numbers having elevated blood lead levels, obviously Port Pirie is at a disadvantage through the nature of its operations. AMC considers that the Zinifex operations have done well, and will make further gains through their efforts in training, work practices and expenditure on plant hygiene improvements.

The capital expenditure plans of the four smelters are compared in Figure 18. In this comparison, the differences in smelter size and metals produced are normalised by taking capital expenditure as a ratio of revenue. Revenue estimates are based on a metal price and exchange rate forecast provided by Zinifex. The figure clearly shows the impact of the structural recovery work at Port Pirie and Hobart on sustaining capital. In the years shown, the main projects include the conversion of Hobart to take 70% Century concentrate feed ($20M), and expansion at Budel by 2006 at an early estimate of €9M. At Port Pirie, $32M is provided in 2011 to 2013 for reduction in sulphur dioxide emissions by a salt-water scrubber. It is uncertain whether the South Australia EPA will require this reduction, but the alternative to a salt-water scrubber of a new acid plant could cost $80M to $110M. The low level of sustaining capital expenditure planned for Clarksville reflects its relatively young plant, historic levels of maintenance and good environmental performance.

Figure 18 Planned Capital Expenditure Comparison, US$M per US$100M Revenue



6.4 Smelter Personnel

In all smelter operations, employee numbers have been reduced dramatically during the last decade and especially so in the last three years. AMC considers it unlikely that further significant productivity gains can be made by future reductions. Technical staff numbers have also been reduced and in the case of Clarksville, AMC considers the number to be rather low. However, Clarksville can draw on other Zinifex technical resources for support.

7 HOBART SMELTER

7.1 Introduction

Zinc smelting in Hobart commenced in 1917 and by 1973, 5 Mt of cathode zinc had been produced. In 1971, the smelter adopted the "jarosite process", which greatly improved zinc recovery and plant capacity improved to more than 200,000 tpa zinc. Until 1997, the jarosite residue was disposed at sea off the Continental Shelf. In 1997, the process was changed to produce PGP, a different form of iron-based residue, which is amenable to further processing at Port Pirie to recover its contained lead and zinc values.

Zinifex Hobart Smelter is located on the western bank of the Derwent River in suburban Hobart and uses the RLE process. All Hobart operations and residue stockpiles are located on this site which has a deep-water port with modern bulk handling equipment. However, as Hobart is distant from most major zinc markets and regular shipping routes, trans-shipment and warehousing of metal in major container ports is often required.

Although much of Hobart plant has been progressively replaced with updated technology, overall production economics remain limited by the age of the cell-house. The cell-house operates with an old configuration of electrolytic cells, preventing full automation. Nevertheless, with its large scale, Hobart rates as an efficient zinc producer.

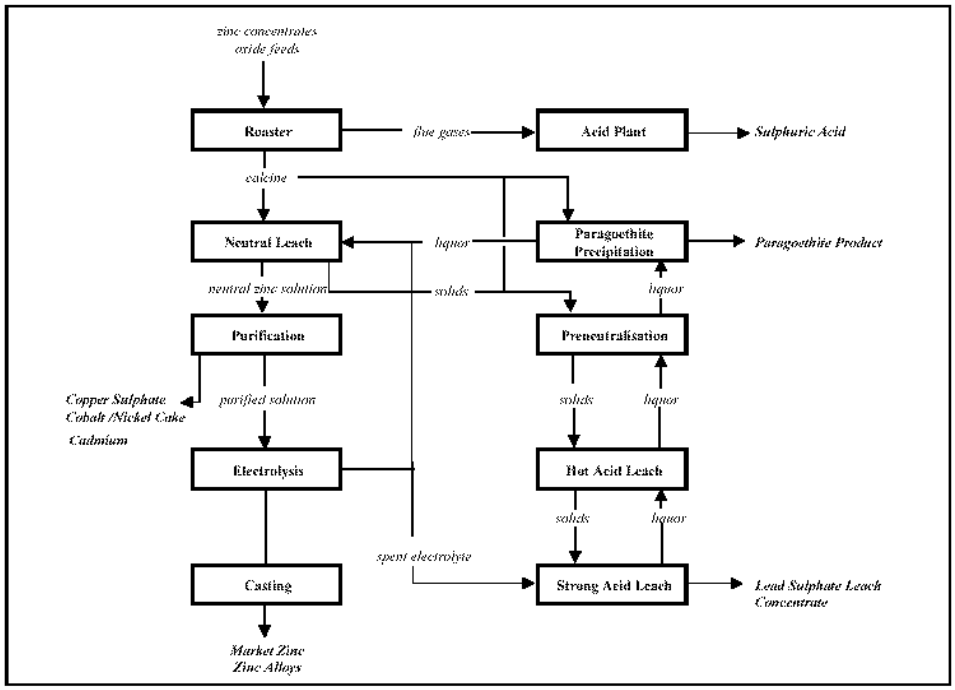
Feed zinc concentrates come largely from current and former Zinifex mines — Rosebery, Century, Broken Hill and Endeavour (formerly Elura). Some Hobart residues contain lead, silver and zinc values which are sold externally or shipped to Port Pirie, where pyrometallurgical processes recover most of the value. Hobart has a legacy of stockpiled residues from historic operations.

Product zinc includes Special High Grade ("SHG") zinc, mainly as slabs and the die-casting alloy ("EZDA") that has a strong market position. By-products include cadmium, copper sulphate, gypsum and sulphuric acid.

7.2 Process Description

A simplified flowsheet of the Hobart plant is given in Figure 19. Zinc concentrates received by ship are unloaded and blended in storage. A typical feed blend contains 54% zinc, 31% sulphur, 8% iron, 2.1% lead, 0.37% copper and 1.8% silica.

Figure 19 Hobart Simplified Flowsheet



7.2.1 Roasting and Acid Production

Roasting is in two parallel equipment trains which consists of a fluid bed roaster with associated gas cleaning and cooling units. The gas is then fed to two acid plants. The efficiencies of gas conversion from sulphur dioxide to sulphur trioxide average about 98.5% and sulphur recovery to acid is over 98%. Tail gases are scrubbed with salt water before stack discharge.

Calcine is collected from bed overflow and from carryover in the gas trains. The calcine is cooled in rotary drums and conveyed to two 10,000t storage bins.

7.2.2 Leaching and Purification

Two small ball mills are used for grinding calcine before leaching in a complex, five-stage process which extracts most of the contained zinc. Each stage involves multiple large leach tanks and associated thickeners, arranged so that the solids pass to progressively more acidic leach conditions. The stages are neutral leaching (itself changed to two stages in September 2003), paragoethite precipitation, pre-neutralisation, hot acid leaching and strong acid leaching. Most of the calcine is added to neutral leaching and some is also added to the paragoethite and pre-neutralisation stages. Spent electrolyte is added to strong acid leach. While some of the leach plant is old, much derives from modernisation in 1991 and the process change in 1997.

The final leach product, now termed Lead Sulphate Leach Concentrate ("LSLC") and typically about 27% lead, 5.6% zinc and 5.8% iron plus silver values, is recovered with pressure filters. This product was formerly supplied to Pasminco's Cockle Creek Smelter for metal recovery; but since the closure of Cockle Creek, Zinifex is selling LSLC to external smelters. LSLC was

previously termed Hobart Leach Product ("HLP"), and the more recent form is Hobart Leach Product 2 ("HLP2").

Since 1997, iron has been precipitated from leach solutions in the form of PGP. Overall zinc recovery (about 92%) in the paragoethite process is lower than in the previous jarosite process, but PGP is a product from which contained lead and zinc can be economically recovered at Port Pirie. It is filtered, dried and mixed with lime before shipment and typically assays about 16% zinc, 2.5% lead, 4.6% sulphur, 7.0% silica, 9.3% lime and 28% iron. Zinc recovery will increase as the treatment rate of Century concentrate rises, mainly as a result of lower production of PGP.

Much of the required solution purification is achieved during the neutral leach and PGP precipitation, but purification for electrolysis further requires zinc dust addition in two stages in a plant commissioned in 1991. In primary purification, zinc dust is added to precipitate copper in a cementation reaction. The slurry is filtered and re-leached to make copper sulphate crystals for sale. In secondary purification, more zinc dust is added with an antimony compound to assist cobalt removal. The precipitate is recovered in pressure filters and then re-leached in two steps for zinc recovery. Cadmium is then recovered electrolytically. The final residue with cobalt, nickel and some lead and zinc is normally sold.

7.2.3 Electrolysis and Casting

The cell-house, comprising six electrolysis cell units with a total of 936 cells, is far behind modern designs but its metallurgical performance compares favourably against world practice. Relatively small electrolysis cells and electrodes are utilised. As is normal practice, aluminium cathodes and lead-silver anodes are used. The two mechanical cathode stripping machines handle some 28,000 cathodes per day in total. The plant requires more manpower for electrode handling from the cells, cell cleaning and maintenance than more modern automated plants. Cell-house current efficiency improved significantly over three years to 91.75% in 2002, but fell in 2003 to 90.9%; it is 90.3% YTD December 2003, but is trending upwards. Electrolysis power consumption of about 3300 kWh/t is higher than in more modern plants.

Some manganese in electrolyte is necessary to obtain good quality cathode zinc and this arises from feed zinc concentrate. Manganese deposits on the anodes as manganese dioxide and some falls off as a sludge. The manganese sludge, containing some zinc and lead, was previously stockpiled, but is now filtered with PGP and shipped to Port Pirie for smelting.

The present casting plant was commissioned in 1970. Zinc cathodes are melted using three electric induction furnaces rated at 1.8 MW. There are four straight-line casting machines and the plant has adequate capacity to produce the range and tonnage of alloys and ingot shapes. Key products are SHG and the diecasting alloy EZDA.

7.2.4 Effluent Treatment

A new effluent treatment plant was commissioned in 1991 to handle runoff and process effluents by lime neutralisation. The recovered zinc-containing solids are recycled to the leaching plant.

To prevent accumulation of unwanted elements such as chlorine in electrolyte, a bleed of spent electrolyte is treated with limestone addition. Zinc in the filtered solids is re-leached, to yield gypsum that is sold. The filtrate goes to the zinc circuit.

7.3 Personnel and Safety

Hobart currently has about 560 employees which represents a significant reduction through the 1990s. There are about 70 contractors in some specialist and non-core roles. Including managers, there are some 23 metallurgical professionals.

AMC considers that employee numbers are unlikely to decrease from the present level, unless there is major investment in new cell-house technology. Further productivity gains will rely on increasing production. Overall plant productivity in 2003 was 401t market zinc per man-year. The professional staff demonstrated good capability with the substantial improvements in plant performance gained since 1999. Retention of this capability both in terms of numbers and experience is necessary if plant performance is to be maintained or further improved.

Safety performance deteriorated from 1999 to 2001, but it improved significantly to Medically Referred Injury Frequency Rates (MRIFR, per million man hours) of 108 in 2002 and 64 in 2003. It continues to improve in 2004. AMC considers significant improvement to be vital and notes that the number of workers with elevated blood lead levels (> 30 ug/dL) is now typically just two to four.

7.4 Smelter Feedstock

Some zinc concentrates are purchased from Australian and overseas mines not presently owned by Zinifex or not previously Pasminco owned.

Century provided 12.5% of concentrate feed in 2002 and 9.6% in 2003, but Hobart plans to increase that proportion to 60% to 70% by end of December 2006. Apart from the advantages of continued internal supply, Century concentrate contains substantially lower iron but higher silica, carbon and nitrogen than the current feed blend, so cannot be treated as a high proportion of feed without process change. The planned change is financially beneficial and also reduces the annual tonnage of PGP produced for treatment at Port Pirie. For the balance of concentrate needs in the long term, Hobart may rely increasingly on imports from South America.

A plant trial in October 2003 demonstrated successful treatment of up to 70% Century concentrate in feed, and provided better definition of the process change requirements. Some technical questions remain unresolved, but these are not major issues. Following the recent commissioning of two-stage neutral leach, Hobart considers that the current circuit is able to process at least 30% Century concentrate in feed without additional capital.

Further associated investment will also be required at the Port Pirie smelter to remove the higher amount of germanium in the changed PGP that contains more than 90% of the germanium input.

In processing near 100% Century concentrate, Budel suffered significant problems that limited roasting capacity. Key considerations for Hobart will be the need to avoid any adverse impact on

overall plant capacity and on zinc recovery in leaching, but Hobart expects both capacity and recovery to improve. AMC considers that it will benefit from the Budel experience but there remains a risk that Hobart may not achieve its production targets during the period of change.

7.5 Plant Performance and Capacity Constraints

During the years 1991 to 1998, market zinc production averaged 202,000 tpa. Zinc production then increased significantly every year, up to 253,434t in 2003, through metallurgical improvements without significant capital expenditure, as shown in Table 22.

Table 22 Hobart Historical and Forecast Production

Marketable Production	1999 Actual	2000 Actual	2001 Actual	2002 Actual	2003 Actual	2004 Forecast	2005 Forecast
Zinc t	214,188	231,650	233,070	251,667	253,434	257,000	258,000
Cadmium t	303	332	258	315	347	328	350
HLP2 t	24,910	29,184	30,772	30,684	26,321	27,381	29,631
Dry Limed PGP t	117,828	117,215	104,367	124,055	120,512	125,676	109,800
Copper Sulphate t	3,516	2,927	2,982	1,929	2,464	2,060	2,531
Acid sold t	388,168	446,735	403,021	431,471	425,792	435,155	435,868

The two roaster/acid plant trains enable Hobart to maintain reasonable continuity of production as periodic shutdowns for inspection and rebuilding are required. Until 2001, each train operated a two-year campaign schedule but management is currently trialling extension to four years with shorter shutdowns in intervening years. Hobart production is limited by roaster capacity. Achievement of plan production needs a high-grade, relatively low-iron feed such as Century, Rosebery and South American concentrates.

In electrolysis, production is limited in part by the electrical current capacity of busbars and the supply system. New feed tanks are operating. The Long Term Plan includes refurbishment of rectiformer units at a cost of $1 Mpa for six years. Upgrade of the electrolyte cooling system in the old cascade units will cost $3M over ten years. Replacement of cells, walkways and structures is on-going.

Achievement of good current efficiency ("CE") is important both to reduce power cost per tonne of zinc and to obtain maximum production. CE has improved from the range 83.3% to 85.3% during 1995, up to 91.5% in 2002. This was achieved through electrolyte purity control and attention in the cell-house to detail. In YTD December 2003, CE is 90.3%, and steps are in place to recover to 91.5%.

Production through December 2003 is 2,600t below plan: AMC considers that the production forecast for 2004 is still achievable. Production above 260,000 tpa market zinc depends largely on concentrate feed types in relation to roaster limitations. Roaster capacity may be increased by use of oxygen enrichment and additional water cooling. Treatment of zinc oxides would assist. The proportion of Century concentrate treated will be limited to about 30% until related process changes are commissioned. AMC considers that the cell-house is operating close to its capacity and that the planned production of over 270,000 tpa from 2008 onwards will require the planned capital expenditure discussed below.

7.6 Plant Condition and Capital Expenditure

Much of the Hobart plant is very old, especially some units in the cell-house but major parts are reasonably new, including much of leaching and purification. The severe deterioration of some plant forced a major program of structural recovery, including replacement of some large tanks. The technology and condition of the older plant sections would be expected to incur rather higher maintenance costs, as well as replacement and improvement capital. Hobart maintenance costs in 2004 are planned for $16.9M, or 13.9% of site conversion costs — surprisingly, the lowest proportion in the four Zinifex smelters. The capital expenditure plan to 2006 is given in Table 23.

Table 23 Hobart Capital Expenditure Plan

Capital Expenditure Class	2004 Forecast $M	2005 Forecast $M
Project	1.0	1.6
Campaign shutdown	3.2	5.9
Sustaining	14.9	23.8
Environmental[1]	0.0	0.0
Total	**19.1**	**31.3**

Note 1: included in sustaining capital expenditure

The Long Term Plan provides for capital expenditure on campaign shutdowns of about $6M to recur for each roaster every four years, with smaller scale shutdowns ($1M) in intervening years, but the efficacy of this practice is unproven. Sustaining capital (including structural recovery and environmental) is forecast to remain at about $22 Mpa after 2005, a level that AMC considers to be reasonable.

Sustaining capital expenditure includes the cost of conversion of the plant during 2004 to 2006 to move to 70% Century concentrate feed and includes change to the leach plant and materials handling ($7M), nitrogen oxides ($NO_x$) removal from acid and plant tail gas ($7M) and calcine grinding improvement ($6M).

Major sustaining items include electrolysis cell replacements ($4.8M project, in progress), upgrade of electrolysis Unit 4 to 40 kA, including spent electrolyte cooling and refurbishment of cell piers ($6M over several years). Upgrades and replacement of high-voltage electrical sub-stations will cost $7.5M and wharf, air and water services also need upgrading. In addition to the cell-house aspects just mentioned, AMC noted several tanks that appear to need replacement or demolition, all of which are included in the capital plan.

Product sulphuric acid is stored in a tank farm close to the Derwent River. This facility has inadequate bunding, so a provision of $3.7M is made. To increase Hobart capacity for making the diecasting alloy EZDA, an automated ingot stacker for an existing casting machine is provided at $1.5M.

AMC considers it vital that these structural and sustaining capital works should proceed for reasons of safety, environmental performance and maintenance of production capability. Overall,

the change to 70% Century feed is economically justified, with gains in higher zinc recovery and reduced tonnage of PGP or equivalent produced.

7.7 Residue Production and Disposal

Historically, certain solid residues from processing have been stockpiled at the Hobart site. Progressively, some of these stockpiled materials are being recovered for re-treatment at Hobart or Port Pirie.

As at 30 June 2003, estimates of the main stockpile inventories of Hobart wastes and by-products (excluding by-products and intermediates) were as follows (dry tonnes):

PLR (Hobart Leach Product 1)	522,465t	unsealed ground; covered
Jarosite	200,000t	sealed ground; covered
Contaminated timber	25,000t	sealed ground, uncovered
Mercury filter cake	3,337t	sealed ground; covered
Manganese dioxide sludge	87,159t	unsealed ground; covered
Contaminated soil	20,000t	unsealed ground, uncovered

Neither jarosite nor PLR is produced in the present plant. Those stockpiles have been covered to stop dust being blown into the community and rainwater ingress. A system for wetlands drainage has been established in the stockpile area to capture seepage and runoff from a one in ten year storm.

The Hobart preferred option for jarosite is to maintain the present storage, if it can be demonstrated that the present storage is environmentally satisfactory. The alternative is to stabilise and dispose of it in a suitably located and constructed storage cell as is required under permit by 2016. Other options continue to be investigated. The Long Term Plan provides for $26M for jarosite disposal from 2010 to 2016.

Processing of residues is limited by capacity constraints at Hobart and Port Pirie. Hobart now produces about 120,000 tpa of PGP. Port Pirie presently processes 10,000 tpa of PLR and 78,000 tpa of PGP, so the excess PGP must be stockpiled there. After the plant changes to 70% Century feed, production of PGP will reduce. Based on current schedules, it may take until about 2020 to fully remove the PLR stockpile from Hobart.

Metal-impregnated timber arising from the removal of old plant is stored in an old quarry on site. The Hobart preferred option is to process this through a proposed Tasmanian waste incineration/power plant. Some better-quality timber may be recoverable for sale. Mercury residue continues to be stored in drums and special containers onsite. Older drummed material is to be reprocessed on-site for approved final disposal.

Manganese dioxide sludge is stored under cover on site. Current production of manganese sludge is incorporated in PGP for treatment at Port Pirie, but no treatment method is presently available to process the stockpiled sludge. Hobart is exploring sale of the sludge.

7.8 Smelter Services and Logistics

Hobart is a major consumer of electricity, drawing approximately 120 MW on a continuous basis, to a peak of 131 MW. Its continuing viability is dependent on maintaining access to at least this amount of low-cost power. Aurora Energy supplies electricity under a contract ending in December 2007, which provides 120 MW, and up to an additional 15 MW. The effect of the Bass Strait power link ("Basslink") on power pricing in peak and off-peak periods is not yet defined. The Hobart power price may increase, but some offset savings may accrue from the interruptibility of a large block of its load.

Hobart presently generates 1.7 MW from waste-heat boiler steam. An additional 9 MW could be produced at a capital cost of about $12M. This option is being studied but is not included in the capital plan.

The deep-water port facility at the site (Risdon Wharf) is operated under contract. This handles all concentrates and bulk by-products. Product metal is trucked to Macquarie 5 Wharf in Hobart.

7.9 Plant Economics and Financial Plan

A break-up of actual and planned Hobart conversion costs (excluding transferred corporate costs and raw materials) is given in Table 24.

Table 24 Hobart Zinc Cash Conversion Cost

Year	2002 Actual	2003 Actual	2004 Forecast	2005 Forecast
People $M	39.6	40.9	42.5	43.5
Energy $M	38.1	41.0	40.3	39.9
Stores + Water $M	19.9	19.3	21.0	23.0
External Services $M	13.1	12.6	11.1	10.1
Other $M	4.9	7.0	7.0	7.9
Total $M	**115.7**	**120.8**	**121.9**	**124.4**
Unit Cost $/t Zn[1]	**453**	**452**	**427**	**434**

Note 1: After credit for by-products

Hobart is largely a fixed cost operation. The major variable cost is electrical power - energy accounts for 32% to 34% of site costs.

AMC considers that the main avenues for unit conversion cost reduction lie in capital expenditure on new cell-house technology, and in increasing production capacity. These measures would increase productivity per employee, and improve unit power consumption. Without such measures, AMC considers that the Hobart unit conversion cost will remain at about the 2005 plan level, and this is reflected in the Long Term Plan.

7.10 Summary of Key Attributes and Issues

Hobart has a strong position with a number of aspects of its operation:

- It is a relatively large scale, medium cost zinc producer.
- It has an experienced, low cost workforce combined with good technical capability.
- It has a good market position in Asia, especially for its EZDA alloy product, although these markets are not geographically close.
- It has a valuable resource of metal in its PLR stockpile.
- It has a reasonable and improving performance in terms of employee safety and health.
- Its operational link with Port Pirie is fundamental to its production of PGP and its progressive elimination of the historic PLR stockpile.
- Likewise, its planned conversion to treat 70% Century concentrate will enable it to meet Zinifex's commitments to eliminate PLR and PGP stockpiles at Hobart and Port Pirie.

However, Hobart age, history and location give rise to some continuing issues:

- Parts of the plant, especially the cell-house, are very old, and demand the present asset renewal program.
- The legacy of stockpiles and site contamination is progressively being reduced, although for some stockpiles the method of final resolution remains undefined.
- Hobart has higher environmental sensitivity from its location in a metropolitan area and beside the Derwent estuary.

The future for Hobart holds a number of risks or uncertainties:

- Hobart is a major power consumer. The end of its present power contract in December 2007, and the construction of BassLink to the mainland may bring higher power costs.
- Probable closure of Hobart's major sources of zinc concentrate - Endeavor, Broken Hill and Rosebery by 2011, and Century in 2016 - will force change of supply, probably to oxides and imported concentrate, with possible associated change in process metallurgy.
- Although Hobart has gained relevant knowledge from the Budel conversion to Century, some process difficulties may be encountered in the transition.

Hobart has commitments to remove the jarosite stockpile by 2016, or resolve its placement; and to remove the PLR stockpile by 2016; these depend respectively on negotiation with the Tasmania EPA, and Port Pirie performance in processing both PLR and PGP.

7.11 Summary of AMC's Review of Forecasts

AMC has reviewed the Two Year Forecast, and concludes that this is in reasonable agreement with the Long Term Plan in terms of physical production and metal marketing, and with site costs. Industrial work restrictions during negotiations caused some loss of zinc production in January 2004. Given that this matter is resolved quickly, AMC's view is that Hobart production should be close to achieving the 2004 forecast. Achievement of the long-term Hobart production forecast of 270,000 tpa from 2008 onwards will depend on appropriate capital investment, and provision of suitable feeds as the present supplying mines reach the ends of their mine lives. Hobart conversion cost per tonne of zinc should improve a little, commensurate with the forecast increase in production.

8 PORT PIRIE SMELTER

8.1 Introduction

The Zinifex Port Pirie Smelter is an integrated base-metal smelter and refinery with flexibility to efficiently process a wide range of lead-dominant feedstocks to make refined lead and lead alloys, silver, zinc, copper, gold and sulphuric acid. It is located on a tidal estuary on the eastern shore of Spencer Gulf, South Australia. All Port Pirie operations and residue stockpiles are located within this site. Adjacent to the smelter is a dedicated port facility. Rail and road are also used for product despatch.

The lead smelter, which uses conventional sintering and blast furnace technology to make bullion, is the largest in the world. The crude lead bullion is then refined using batch technology. Precious metals and antimonial lead alloys are recovered as a byproduct of lead refining. Zinc is produced from blast furnace slag and from acquired residue feedstocks using slag fuming, leaching and electrowinning. Copper is contained in lead blast furnace bullion and is recovered from matte byproduct using a unique leach process, followed by solvent extraction and electrowinning.

The smelter was built in 1889 for processing early Broken Hill lead concentrates. Since then the smelter has been progressively upgraded in throughput and operating efficiency to a nominal capacity of 240,000 tpa of lead from one large blast furnace. The lead refinery together with its associated precious metals refinery was largely rebuilt and modernised in 1998 and has demonstrated capacity of 275,000 tpa. The current zinc and copper production facilities were commissioned in 1967 and 1984 respectively. Current performance reflects the impact of a business improvement process from 2001.

Lead concentrate feedstocks are drawn from current Zinifex and former Pasminco mines (Rosebery, Century, Broken Hill and Endeavour) and external concentrates are also purchased. Until closure of the Cockle Creek smelter, the lead refinery at Port Pirie treated its crude lead bullion for refining. Residues for processing are drawn from Hobart and from onsite zinc-rich slag, as well as other zinc-rich materials such as steelmaking electric arc furnace dust. For many years, most concentrates were received by rail, but with the diminished importance of Broken Hill, increasing reliance is being placed on seaborne deliveries.

Lead is refined to soft lead, 99.97% and 99.99% grades, deliverable to the London Metal Exchange ("LME"). Another grade of soft lead, named VRLA, is produced for the lead-acid battery market. Port Pirie also produces a range of lead alloys. Zinc is produced as SHG metal as well as a range of zinc alloys. Cathode copper of near LME A grade is manufactured. All recovered silver is LME grade and a small quantity of gold is also produced. Other metallic by-products include cadmium metal and a high bismuth lead alloy. Around 8% of byproduct sulphuric acid is consumed internally in zinc and copper production and the balance is sold.

The old operations left a significant legacy of contamination, but the present operation contributes minimal additional pollution and is well accepted by the local community. Port Pirie takes an active role in community health matters related to its operations.

The Port Pirie operations are an important asset to Zinifex. It would be very difficult to establish a new lead-zinc smelting operation with the flexibility of the present site, under present environmental regulations and community pressures.

8.2 Process Description

A simplified flowsheet of the Port Pirie plant is shown in Figure 14.

8.2.1 Lead Smelting

Lead smelting operations are based on an updraught sintering machine and blast furnace. Incoming lead concentrates and other feeds are unloaded to either a storage building with 20 bins each of 250t capacity, or to a large storage shed of capacity in excess of 70,000t.

From storage the sinter plant is fed with a blend of lead concentrates, fluxes, residues and other returns. An adjacent pressure filter dewaters the residue from the zinc plant, for incorporation in the sinter feed.

Sintering. The sinter plant, originally installed in 1955, has an effective roasting area of 92 m^2 over nine windboxes. A thin 35 mm layer of feed on the machine pallets is ignited and the main feed bed to 400 mm total depth is fed on top. The feed oxidises and sinters at about 1100°C to become a hard cake. Product sinter is crushed and screened, so that sinter fines are returned to mix with new feed. The facility had ample capacity to supply the blast furnace when operation was based mainly on high-grade Broken Hill lead concentrates. Operating practice was changed to process large tonnages of PGP and PLR from Hobart. The rate of treatment of residues is limited by the need to maintain good sinter quality and the resulting blast furnace performance. Product sinter contains about 47 % lead.

Sulphur-rich gases, containing approximately half of total input sulphur, are collected from the feed end of the sinter plant and are sent to the acid plant while discharge-end, low-sulphur gases are cleaned in a baghouse and then discharged through the smelter main stack. The plant operates to mass rate limits on stack sulphur emissions.

Acid plant. The acid plant was commissioned during the mid 1950s, rebuilt in 1976, and further major capital works were completed in 1989 to increase sulphur capture. It has a nominal

capacity of 95,000 tpa sulphuric acid at 98 % grade. It has a four-pass converter and single absorption, giving conversion efficiency of 96.7 % to 98 %. Sulphur dioxide-rich gases from sintering are cleaned in electrostatic precipitators before entering the plant, which includes a mercury removal stage so that acid meets Australian agricultural specifications. The product "black acid" is sold for fertiliser manufacture and for metallurgical applications. An acid de-odourisation stage was commissioned in 2002 to neutralise the odours generated by organics which originate from Century lead concentrate.

Lead blast furnace. Port Pirie operates a single blast furnace which is the largest of its kind in the world. A telpher charge car system handles all the feed material to the furnace. Sinter from the updraught sinter plant is weighed out into charges of some 3,800 kg which are combined with an appropriate amount of coke that constitutes 9 to 10 percent of the furnace charge. The coke acts as both a fuel and reductant. Blast air is enriched with about 4 % oxygen to increase production and to maintain good tuyere conditions. Molten lead and slag are continuously discharged through a forehearth. Production capacities of up to 800 tpd of bullion have been achieved and averaged 729 tpd for 2003 (excluding a planned shutdown).

Lead bullion flows to bullion ladles and slag to 20 tonne slag ladles for transfer to the slag fuming plant. The lead bullion contains some sulphur and arsenic and by-product metals such as copper, silver, gold, antimony and bismuth that are recovered in the refining operations. The slag has 17 % to 18 % zinc and 2 % lead that are largely recovered through the zinc plant.

A partially open blast furnace top allows access for accretion removal, but this also allows occasional emission of fugitive gases. Despite significant improvement, this source remains a contributor to lead-bearing dusts depositing in the community. Port Pirie is assessing methods for enclosing the furnace top to reduce emissions from this source. Waste gases from the sinter plant, blast furnace and hygiene collection are filtered in a centralised baghouse before discharge up the 205m tall stack.

8.2.2 Lead Refining

The main lead refinery was built in 1958 but substantially upgraded in 1998 to replace some older continuous process stages with modern batch units. It is now a highly efficient and productive unit, with a capacity well in excess of the blast furnace.

The first stage of lead bullion processing consists of continuous copper drossing which decreases copper levels from 2.5 % to 0.1 %. A sulphur drossing unit then achieves near-complete copper removal down to 0.005%. De-copperised bullion then flows through various stages of lead refining using a series of batch treatments in nine large vessels or pans of 420t capacity. Operations include:

- The removal of arsenic and antimony by oxidation or "oxygen softening". The softener slag goes to a rotary furnace for reduction to crude antimonial lead alloy and arsenic is converted into an iron-arsenic speiss that is stockpiled.

- The removal of silver and gold by zinc addition and controlled cooling. The resulting silver-lead-zinc alloy with about 6 % silver is liquated to upgrade the alloy to 25 % silver, 10 % lead and 65 % zinc. This product is sent to the Precious Metals Refinery, while the liquation kettle slag is recycled to the blast furnace.

- Vacuum dezincing, which removes the residual zinc from the bullion following desilverising. The zinc level is decreased from 0.6 % to 0.04 %.

- Stirring of caustic soda into pans to remove residual zinc and other impurities.

- Subject to bismuth levels or product requirements, removal of bismuth with calcium and magnesium which occurs in a modern continuous debismuthising plant. This plant was also upgraded in 1998 and is capable of removing bismuth to 0.005 % as is needed for 99.99 % grade lead.

Refined bullion is cast into 25 kg ingots or one tonne blocks. Ingots are cast, stacked, weighed and strapped by an automated straight line moulding machine. A range of lead alloys is also produced, and cast with a second moulding machine.

The silver-lead-zinc alloy from liquation is treated in two 3.5t vacuum induction retorts to recover zinc and further upgrade the alloy to more than 60 % silver. Lead in the resulting high-grade silver-lead alloy is oxidised in a bottom-blown oxygen cupel to make a crude silver doré that is electro-refined, to produce 99.99 % refined silver that is granulated or cast for sale. Sludge from the cells is processed to make a semi-refined 98 % gold that is cast into small ingots and sold to refineries.

Overall Port Pirie recovery of lead is very high at 99.5 %. All dusts and drosses are recycled, and lead in blast furnace slag is almost all recovered through zinc plant residue that is returned to the lead plant. Silver recovery is 96%, gold 94 % and copper 84 %. There are some unexplained anomalies at times in metallurgical accounting, possibly due to stock movements and uncertainties in tonnages and assays of in-circulation materials, but AMC considers that in a long-term context the recoveries quoted above are reasonably correct.

8.2.3 Zinc Production

Zinc is recovered from lead blast furnace slag (containing 17 % to 18 % zinc) in a zinc processing plant with a capacity of 44,000 tpa of SHG zinc.

Slag fuming. The two water-jacketed slag-fuming furnaces are charged with molten slag direct from the blast furnace and with cold slag from stockpile. Other oxidised zinc feeds, including zinc silicate ore from Beltana and zinc-containing materials such as steelmaking electric arc furnace dust and zinc dross, are also charged as a slag mix having 18 % to 23 % zinc. The furnaces are fuelled with pulverised fuel coal (10 % ash) injected into the bath; coal consumption is about 1.07t/t of zinc fumed. Productivity is improved with a high proportion of molten slag feed. Waste heat is recovered from furnace gases by boiler and heat exchangers that preheat furnace air blast. The zinc oxide fume is collected in a baghouse. The depleted or tail slag with

near zero lead and about 2.2 % zinc passes the Toxicity Characteristic Leach Procedure ("TCLP") test, and is acceptable for landfill. A portion of this slag is now being used in the cement manufacturing business, with significant opportunities to expand sales of this product.

Zinc oxide fume dehalogenation. Collected fume is roasted at 1100°C in two 27m long rotary kilns to remove halides (chlorine and fluorine). Roasted fume passes to a rotary cooler and is then ground in a ball mill with weak zinc plant wash water and pumped to the leaching and purification plant. Roasted fume typically has 66 % zinc, 10 % lead and low levels of silver, antimony, arsenic and halides. Windblown fume from the slag fuming/kiln area makes a significant contribution to the lead content of dusts blown over community areas. Port Pirie is working on preventing spillages and more effective containment of zinc oxide fume.

Leaching and purification. Zinc oxide fume is batch leached at 85°C for 90 minutes in two stainless steel tanks with spent electrolyte. An iron precipitate, sourced by using some 6,000 tpa of Hobart unlimed paragoethite, removes much of the antimony and arsenic impurities, as well as some germanium. About 300 tpa of Hobart manganese sludge is also used in the electrolyte. About 20,000 tpa of leach residue containing 8.5 % zinc and 32 % lead is re-pulped, thickened and washed in two counter-current stages and then pumped back to a pressure filter located in the sinter plant feed area. Overall zinc recovery, allowing for recycle of residue to the lead plant, is about 89%.

The resulting solution is batch purified with zinc dust in two stages. In the first, copper sulphate and arsenic trioxide are added at 85°C and in the second at 75°C, copper sulphate is added. After filtering, this solution with 185 g/L zinc is cooled to 35°C and pumped to the electrolysis circuit.

Electrolysis and casting. The cell-house has 210 concrete cells, each with 40 cathodes of about 1 m^2 effective area and 41 anodes. Cathodes are smaller than those at Hobart and are fabricated from used Hobart cathodes. New anodes are manufactured on site with a lead-silver alloy using silver and lead from the refinery combined with reject anodes. Electrolysis power is provided through three recently refurbished rectiformers. Electrolyte is kept at 35°C to 38°C by circulation through cooling towers. Spent electrolyte has 180 g/L acid and 65 g/L zinc.

Two mobile mechanical stripping machines are used for cathode zinc removal. SHG quality, cathode zinc is melted in two 17t induction furnaces and cast into slabs, or into blocks. A separate furnace is employed for special galvanising alloy production.

Zinc dust consumption is now 45 kg/t to 50 kg/t cathode, close to best practice. Improved control in purification increased current efficiency from 86.9% in 2003 up to 88.2% YTD 2004. The inherent design and operating conditions at the Port Pirie zinc plant prevent the cellroom from reaching the very high efficiencies of other group smelters such as Budel.

Based on the good plant performance of 2003, Port Pirie believes it can achieve long-term plan production of 44,000 tpa zinc. Based on recent performance, AMC believes that rate is attainable after completion of structural recovery work in the cellhouse during the next two years. Modifications to cope with high germanium inputs from increased Century concentrate treatment

at Hobart are being assessed, with some concepts producing a potentially valuable germanium by-product.

8.2.4 Copper Operations

The copper plant has a nominal capacity of 4,300 tpa of cathode copper. Copper matte (a lead-copper sulphide) from the drossing of lead bullion is ground in a ball mill and then leached in a solution of sulphuric and hydrochloric acids. After thickening and pressure filtration, leach residue is returned to the lead plant. Solvent extraction transfers copper to a sulphate solution for electrowinning in 30 cells using titanium cathodes. Overall copper recovery to cathode is about 85 %. Problems with transfer of impurities to the cathode are being addressed, and the product cathode is all being sold at near LME A grade quality.

Cessation of Cockle Creek bullion feed resulted in a loss of copper inputs to the lead smelter. Additional copper inputs are being sought. Plant capacity is being upgraded to 4,500 tpa with modifications. Process constraints have prevented Port Pirie from reaching nominal capacity, but AMC considers that considerable effort will be needed to lift production near that level. Fire protection systems are being upgraded to prevent the incidence of serious fires that have recently occurred in similar solvent extraction plants.

8.2.5 Cadmium Recovery

Fume collected from sintering and blast furnace gases in the central baghouse and electrostatic precipitator contains about 2 % cadmium, much of which is water-soluble. The fume is slurried and filtered and the filtrate is pumped to a zinc cementation stage to precipitate metallic cadmium. This is washed, melted under caustic soda and cast into bars, with an annual plant capacity of 150t. Stockpiled production of some 400t was recently sold. Markets are being developed for ongoing annual production.

8.3 Smelter Feedstock

In recent years Port Pirie has experienced a substantial change in concentrate supply away from traditional sources such as Broken Hill to new concentrates from Cannington and Century with different properties and handling requirements.

Lead and silver operations. The bulk of sinter plant feed is lead concentrate from Broken Hill, Endeavour, Rosebery, Century and Cannington but residues (mainly Zinifex group sourced) and some local materials are also consumed. Until November 2003 Port Pirie refined crude lead/silver bullion from Cockle Creek.

Following the sale of Broken Hill and the recent sale of Endeavour (formerly Elura), the mine life of both operations has been extended to 2011 securing longer-term concentrate supply. Rosebery plans to continue to supply concentrate through to 2010, although the life of this mine may be further extended. Port Pirie has a long-term contract for Cannington concentrate at 70,000 tpa. Zinifex believes that the requisite quantity of concentrates from external sources will be available in future years, but with commercial terms less attractive than those from Australian mines. The balance of any concentrate requirements is made up with Century lead concentrate

(approximately 60,000 tpa to 80,000 tpa). Based on the current Long Term Plan the concentrate feed mix is relatively stable for the next six to eight years.

Treatment of Hobart products including PGP and PLR (containing about 17 % and 20 % zinc respectively) is important to meet Zinifex's economic and environmental goals. They provide a valuable source of lead, zinc, copper and silver. At present, the secondary materials treatment rate is approximately 100,000 tpa through the sinter plant, but is limited to make quality sinter for good blast furnace performance.

Zinc operations. As noted, the zinc fuming furnaces are fed with molten lead blast furnace slag, plus a cold charge feed mix. Port Pirie has identified a number of opportunities for processing small quantities of external residues (eg galvanising ashes, arc furnace dusts) which are sourced on favourable terms. Incremental zinc production can also be achieved through the processing of zinc bearing materials containing high metallic content through the dross treatment plant.

Copper operations. Historically all Port Pirie copper feed was derived from low concentrations in lead and zinc feedstock supplemented by additional copper in quenched bullion from Cockle Creek. With the reduction in concentrate from Broken Hill and closure of Cockle Creek, additional copper inputs are being sought.

8.4 Plant Performance and Capacity Constraints

Some key Port Pirie process stages, including the sinter plant, acid plant and blast furnace, are reliant on a single plant unit. Overall plant performance depends on maintaining their availability, notwithstanding the need for periodic downtime. Sinter plant operating time efficiency ("OTE") was 87.7 % in 2003, including a 14 day planned shutdown. Port Pirie plans to improve OTE to 92.2 % in 2004 including a 5 day planned shutdown (December 2003 YTD 93.5%). OTE of the slag fuming plant, a key to zinc production, was 90.4 % in 2002 and 80.6% YTD December 2003 (excluding major survey shutdowns); it is 9% below plan YTD, partly to reduce fume stocks.

Production of lead, silver, zinc and acid improved significantly in 2002 and has been sustained since then. This was a good result, contributed by improved sinter plant process stability producing improved quality sinter and higher outputs from Cockle Creek. Actual and planned production is shown in Table 25.

Table 25 Port Pirie Historical and Forecast Production

Marketable Production	1999 Actual	2000 Actual	2001 Actual	2002 Actual	2003 Actual	2004 Forecast	2005 Forecast
Lead t	196,498	233,476	215,221	273,900	267,455	244,600	226,000
Silver t	290	402	364	431	462	409	426
Gold kg	562	807	700	806	829	650	603
Copper t	3,273	3,731	3,782	3,619	3,770	4,080	4,120
Zinc t	31,871	34,681	32,110	40,609	42,953	40,900	41,300
Acid t	75,545	82,901	82,334	90,227	98,342	94,900	97,000

Lead production in 2002 was the highest on record. Silver production and gold production in 2003 were also records. Lead production YTD December 2003 is 2,600t below forecast of which 2,000t is due to early closure of Cockle Creek. AMC considers meeting forecast remains possible.

The fall in lead and silver production from 2004 onwards is due to the loss of quenched bullion from Cockle Creek. Zinc production in 2003 was the third highest on record, with reduced production in 2004 and 2005 due to structural recovery work reducing zinc plant availability. Acid production has increased over recent years with the improvements in sinter plant utilisation and modifications to the hood in the sinter plant.

AMC considers that the long-term planned lead and silver production is achievable, depending on maintenance of the plant performance levels demonstrated in 2003. Based on 2003 performance, the zinc targets for 2004 to 2005 should be achievable. Performance in copper production has improved compared with 2003, so the forecast production for 2004 should be reached.

8.5 Plant Condition and Capital Expenditure Plan

The Port Pirie plant is a mixture of older and newer buildings and equipment. Expenditure constraints in recent years have meant that areas of older plant now require attention for safe efficient operation. External engineering consultants defined structural repair priorities. "Structural Improvement Teams" are in place and much has already been completed. More work is required to be completed with plans in place to progress these works, which is supported by allocation of capital in future years.

Port Pirie maintenance costs in 2004 (people plus supplies and services) are estimated at $10.5M for lead and $7.6M for zinc, that is equivalent to 18.1% of zinc conversion cost. Together with sums for copper, precious metals and overheads distribution, total maintenance is estimated at close to $24M, also close to 18% of total conversion costs.

The major areas of focus for structural improvement expenditure are the blast furnace telpher, zinc electrolysis cell floor and sinter plant structures. Forecast capital expenditures over the years 2004 and 2005 total $8.9M for structural recovery and $11.9M for sustaining the plant (a total of $20.8M). AMC considers that it is vital that this work continue; not to do so will compromise safety, the environment and production targets.

Campaign shutdowns are planned for major production units. This primarily involves the blast furnace (2 year cycle), and slag fuming boilers (1.5 year cycle), where forecast expenditure for 2004 and 2005 years totals $8.4M. A major improvement effort has extended campaign shutdown intervals, and additional work is planned to further extend campaign life.

The Port Pirie capital plan makes a substantial allocation for environmental and safety and welfare improvements. The major environmental focus is the reduction of fugitive emissions from the site with a $3.0M expenditure planned over the 2004 and 2005 years in the slag fuming

and kilns area. An area of major expenditure is for blast furnace total fume capture for which $10M is allocated over 2008 to 2010.

As the proportion of Century zinc concentrate feed to Hobart increases, the germanium level in PGP will rise and when processed at Port Pirie will report to zinc fume. Additional iron precipitation facilities will be required to remove the increased germanium before the zinc electrowinning process, with an estimated capital cost of $14.2M between 2004 to 2007.

The capital expenditure forecast to 2005 is given in Table 26. Average capital expenditure at Port Pirie is forecast to remain generally in the range $28M to $30M per annum in the longer term.

Table 26 Port Pirie Capital Expenditure Plan

Capital Expenditure Class	2004 Forecast ($M)	2005 Forecast ($M)
Major projects	0.0	0.0
Structural recovery	2.9	6.0
Campaign shutdown	2.4	6.1
Safety and welfare	2.3	2.8
Environment	2.9	6.0
Germanium removal	0.2	3.5
Sustaining	4.9	7.0
Total	**15.6**	**31.4**

Port Pirie occasionally exceeds the National Environment Protection Measure ("NEPM") standards for ground-level concentration of sulphur dioxide (SO_2). Only about half the SO_2 generated by the plant is now converted to sulphuric acid. Measures to substantially lower the SO_2 emission rate may be required by the South Australian EPA. Options include a new acid plant costing $80M to $110M, and, alternatively, a salt-water scrubber costing $20M to $25M. Study of these options is at an early stage, and the long-term plan makes provision for expenditure of $32M in 2011 to 2013.

AMC considers that the capital plan is reasonable, given the need for safety, structural recovery, environmental compliance and attainment of production plans. The expenditure allocated for decreasing lead fugitive emissions may be low.

8.6 Residue Production and Disposal

Port Pirie produces some 200,000 tpa of dezinced slag that is practically inert, passes regulations for safe disposal to landfill and is currently stored on the Port Pirie site. Successful trials of this material in cement manufacture have recently led to the establishment of a contract to sell 50,000 tpa. Further opportunities are also being explored which could take advantage of its inherent cementing properties.

Almost all of the historic blast furnace granulated slag accumulation has been processed for zinc and lead recovery, with completion expected by 2006.

After consultation with the SA EPA in 2001, Port Pirie has instituted an "Intermediates Elimination Plan" to recycle many of the historic accumulations. While reducing the environmental liability of the site, these intermediate products are a further valuable source of metal units. This plan has progressed well with many stocks now reduced to low working levels and some stockpiles now eliminated.

As of 30 June 2003, estimated residue and intermediates stockpile tonnages were:

Port Pirie Intermediates, t		Hobart Intermediates, dry t	
Sinter	7,100	PGP (limed)	216,000
Softener slag	3,283	PGP (unlimed)	3,300
CDF slag	1,820	PLR	3,702
Copper speiss	1,219		
Copper matte	1,119	Wastes, t	
Returns (incl. flue dust)	9,678	Calcium arsenite residue	120,000
Copper leach residue	5,770	Iron arsenic speiss	11,000
Zinc plant residue	72		
Sludge	18,000		
Roasted fume	1,570		

Port Pirie is permitted to stockpile excess PGP to a maximum 350,000 dry tonnes. If Hobart delays implementation of its Century processing plans by more than two years, there is a risk that the PGP stockpile limit could be exceeded. The whole Hobart stockpile of PLR will be progressively shipped to Port Pirie for treatment by 2020, and with a reduction in PGP production from Hobart as its proportion of Century feed increases, the Port Pirie stockpile of PGP will be consumed by 2020 as well.

Port Pirie has not committed to reprocessing of calcium arsenite residue or of iron arsenic speiss. Technical process options exist to convert these materials to more environmentally acceptable forms, but further metallurgical and economic investigation is needed.

Port Pirie commissioned a new Process Effluent Treatment System ("PETS") in 2002 at a capital cost of $18M. All process waters are collected centrally, treated with lime and sodium sulphide and the solids removed by thickening and belt filtration for recycle. The plant performance is meeting its design requirements.

8.7 Smelter Services and Logistics

Electricity. With a load of about 30MW, Port Pirie is a major South Australian consumer of electricity, two-thirds being used in the Zinc Plant. The Zinc Plant electricity contract runs until June 2007. A new electricity contract was negotiated for the Lead Plant in November 2003 and runs to October 2006.

Natural Gas. Natural gas is used by Port Pirie in both lead and zinc production. Gas is supplied under contract for a consumption of 1 PJ / year. The contract was initiated in January 2000 for five years. The recent disruption of natural gas supplies in South Australia fortunately only resulted in the loss of a small tonnage of zinc production and no loss of lead production.

Oxygen. Port Pirie has a 15 year contract from 1997 for the supply of oxygen for the processes in the Blast Furnace, Copper Plant, Refinery and Slag Fuming plants, based on an air separation plant on land leased from Port Pirie. Half the supply is protected by a liquid oxygen storage tank.

Shipping and rail. Port Pirie leases and operates an adjoining port facility that is equipped with bulk unloading, loading and handling facilities. The facility caters for both inwards and outbound concentrate movements, coke, coal and PGP and PLR from Hobart. Zinc concentrates for Hobart are railed from Broken Hill, as are lead concentrates from Broken Hill and Endeavour mines. About 100,000 tonnes of lead and zinc metal is shipped in the "Break-bulk" format (non-containerised), plus a small amount of containerised lead and zinc.

Road. Road transport is used to ship both lead and zinc metal from the Port Pirie site to markets within Australia and to the port of Adelaide where it is containerised for shipment to overseas markets

8.8 Personnel and Safety

The Port Pirie workforce is currently about 820 people including about 530 award personnel and some 115 contractors.

Productivity in 2003 for lead operations (639 t/person)was high by world standards, but was low for zinc (136 t/person) due to the small scale and high labour intensity of the operation. Without significant capital expenditure in zinc the need for this labour will continue. It is unlikely that much further reduction can be made in employee numbers. The low cost of zinc feeds allows the zinc operation to function competitively in its own right, even with the disadvantage of high power costs compared with other zinc smelters in the group. The plant has 27 metallurgical professional staff. AMC considers that technical and supervisory staffing is adequate, staff have done excellent work in achieving improved plant performance over the past two years.

The relative remoteness of the Port Pirie site causes some recruitment and retention difficulties, particularly in the specialist technical fields. The remainder of the workforce are mostly long term Port Pirie people who are committed to the operation and provide a very stable base.

Relationships with the local unions are constructive and balanced. The support given during the period of administration by the employees and the unions has been extraordinary. Port Pirie operates under an Enterprise Agreement in which all award employees are remunerated differentially according to individual performance.

Significant improvements in safety performance have occurred in recent years with MRIFR falling from over 100 in 1999 to a 2003 level of 42. The number of workers with lead in blood >30 μg/dL has been steadily diminishing over the past five years but has now levelled out. Programs to improve contractor awareness have been successful. A strong safety program,

promoting significant employee involvement focusing on behavioural change, complements a comprehensive safety management system. This remains a very high focus activity on the site with further improvements required to achieve world class performance.

8.9 Plant Economics and Financial Plan

After support department costs are distributed pro-rata across direct metal production costs and neglecting acid credits, the Port Pirie unit conversion costs for its major metal products are as shown in the Table 27 below. These costs do not include metal realisation expenses.

Table 27 Port Pirie Unit Cash Metal Conversion Costs

	2003 Actual	2004 Forecast
Lead $ /t	293	318
Zinc $ /t	1160	1150
Copper $ /t	1379	1185
Precious Metals $ /kg	7.9	8.8

Note: Overhead costs allocated 85% to lead, 14% to zinc, 1% to copper.

As blast furnace slag is regarded as being zero cost to the zinc plant, the unit conversion cost is close to the total cost.

Table 28 presents a breakdown of Port Pirie total site conversion costs (excluding transferred corporate costs). Costs were higher in 2003 due to planned blast furnaces and slag furnace shutdowns.

Table 28 Port Pirie Overall Cash Metal Conversion Cost

Year	2002 Actual	2003 Actual	2004 Forecast	2005 Forecast
People $M	45.8	49.1	50.1	50.8
Energy $M	40.9	41.8	40.9	40.6
Stores + Water $M	23.4	27.0	24.7	23.6
External Services $M	12.1	14.6	13.9	11.6
Other $M	3.7	4.5	3.8	3.9
Total $M	**125.9**	**137.0**	**133.4**	**130.5**

8.10 Summary of Key Attributes and Issues

Port Pirie has a strong position with a number of aspects of its operation:

- It is a very large, low cost lead and silver producer.
- Together with its zinc and copper production operations, it has dominant capability to process recycled by-products and residues.
- Its zinc smelter, though small, is competitive through its very low effective feed costs.
- Its competition is limited, as new greenfield lead smelters are unlikely.

- It has a strong brand and market position, particularly for some premium products, and in the Asian battery market.
- It has an efficient and stable workforce, and strong technical capability.
- Its safety and health performance has improved significantly, and efforts for further improvement continue.

However, Port Pirie's age and history give rise to some continuing issues:

- Parts of the plant are old and deteriorated, forcing the on-going program of structural recovery.
- Historic stockpiles of intermediate materials remain, but are being recycled in an elimination program.
- The environmental legacy of some 115 years of smelting remains, both regionally and on the plant site.
- Port Pirie environmental performance has improved greatly through very substantial investment over the past 30 years. Further investment is planned, particularly to address fugitive dusts, and possibly reduction of sulphur dioxide emissions through a new acid plant.

The future for Port Pirie holds a number of risks or uncertainties:

- It suffers high costs through its zinc plant power supply contract that runs to June 2007. Significant improvement in costs may then be possible.
- Probable closure of Port Pirie's major sources of lead concentrate - as presently foreseen, Endeavour, Broken Hill and Rosebery by 2011 and Century in 2016 - will force change of supply, probably to more recycled material, residues and imported concentrate, against a tight supply market.
- There may be a requirement to increase the capture of sulphur dioxide. This will require further study, but $32M is provided in the Long Term Plan for the period 2011 to 2013.
- Port Pirie has commitments with the SA EPA to eliminate the PGP stockpile by 2020; this also links with similar commitments by Hobart in Tasmania to eliminate its stockpile that is also processed by Port Pirie. There remains some uncertainty about Port Pirie's capability to meet these goals.

8.11 Summary of AMC's Review of Forecasts

AMC has reviewed the Two Year Forecast, and concludes that this is in reasonable agreement with the Long Term Plan in terms of physical production and metal marketing, and with site costs set out in Table 28. AMC's view is that Port Pirie zinc production, despite the recent disruption of natural gas supply, should achieve forecast. Port Pirie lead production YTD December 2003 is below plan largely due to the early closure of Cockle Creek. Although there were some short-term operational difficulties in January 2004, Port Pirie has reasonable prospects of achieving forecast lead production.

The key long-term issue affecting Port Pirie production will be the availability of lead concentrate feed. The main uncertainty for capital expenditure is the possible need for a new acid plant or sulphur dioxide scrubber. Given completion of the present structural recovery program, it remains important for maintenance to be kept at a level that prevents another cycle of plant deterioration.

The Long Term Plan for Port Pirie forecasts metal production rates of about 232,000 tpa lead and 44,000 tpa zinc, with overall metal conversion costs to remain in real terms at close to the level shown in Table 28 for 2005. AMC has reviewed the plan and the assumptions on which it is built, and is of the opinion that the plan is reasonable.

9 BUDEL ZINK SMELTER

9.1 Introduction

Zinifex Budel Zink is situated near Weert in the south east of the Netherlands, near the Belgian border. The smelter was commissioned in 1974 and uses conventional RLE technology. A previous smelter on the site used the horizontal retort process. Budel is one of Europe's most efficient zinc smelters in terms of its metallurgical performance, and with a capacity increased to 232,000 tpa of product zinc at end of 2004, it is about the ninth largest in the world.

As originally constructed, Budel used the jarosite process and disposed of the jarosite waste in ponds located on the site. Jarosite is a complex hydrated iron sulphate which contains residual levels of zinc and lead. When the Netherlands Government licensed the fourth (and last) jarosite pond in 1993, Budel committed to zero residue production by July 1998, a date subsequently extended to July 2000. Sourcing low-iron Century zinc concentrates and producing a lead-silver by-product for sale to lead smelters achieved this goal, and jarosite production ceased in April 2000. Initially the process conversion had a detrimental impact on roasting plant capacity, but by April 2003 the original roasting capacity was restored through plant modification.

Budel is now almost totally dependent on supply of concentrates from Century and this constraint will continue until other high grade, low iron concentrates with sufficient lead and silver to yield a saleable leach product become available. However, concentrates can be supplemented by purchase of suitable zinc oxide feeds.

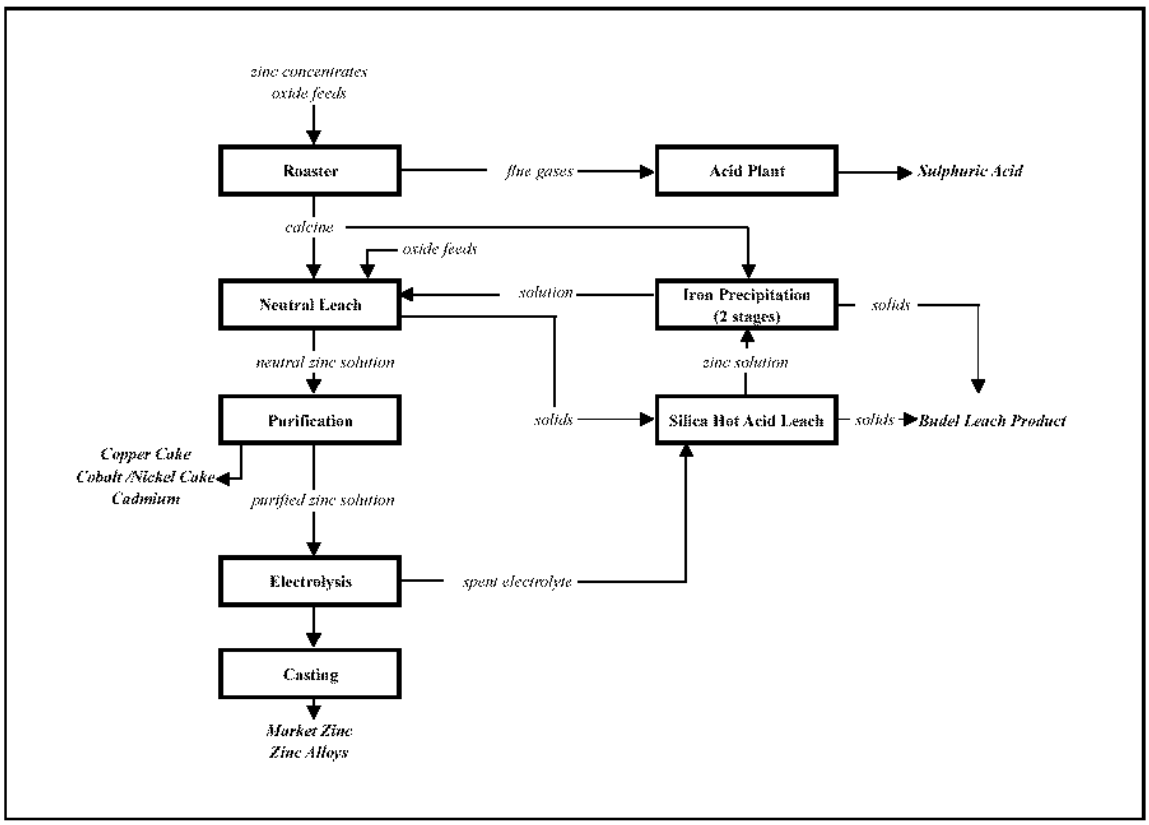
Product zinc comprises SHG and Continuous Galvanising Grade ("CGG") grades. By-products include cadmium and sulphuric acid. With access to rail and canal transport in an area of good infrastructure, Budel is well located to supply European markets. It has strong brand recognition, but operates in a very competitive market environment.

While Budel is the only virtually waste-free zinc smelter in the world, the site suffers soil and ground water contamination from the jarosite dams and from some of the old zinc retort residues or zinc ash. Apart from where this ash lies under existing structures, it has been reclaimed and is placed as topping on the jarosite dams as part of the sealing activity.

9.2 Process Description

A simplified flowsheet of the Budel plant is given in Figure 20.

Figure 20 Budel Simplified Flowsheet



9.2.1 Roasting

Concentrates are delivered by rail from the port of Antwerp at a rate of about 1,700 tpd and conveyed to a 50,000t capacity storage building where a bedding plant is used to smooth variations in concentrate composition and moisture content. Zinc oxide feeds and plant recycles such as filter cakes are also included in the blend. Some water may be added to aid roaster performance.

Concentrate is fed to two standard, fluid bed roasters each of 69 m^2 hearth area, that operate with a bed temperature of about 930°C. Product roaster calcine with less than 0.5 % sulphide sulphur is collected in bed underflow, from carryover in the waste heat boiler and from downstream dust removal. After cooling, the combined calcine is stored in two bins totalling 13,000t capacity prior to leaching. Total roaster on-line time is normally about 93% with an annual maintenance shutdown of five to seven days.

Each roaster has a gas train that includes a waste heat boiler, cyclones, dry electrostatic precipitator, wash tower and wet electrostatic precipitator. These are coupled to a standard

mercury removal plant. The single sulphuric acid plant has capacity for some 1,000 tpd acid, but acid production has reduced since the change to Century feed with its lower ratio of sulphur to zinc. A recently installed plant removes NO_x from tail gases. Mercury in acid meets European Community requirements; however, the EC limit may be further reduced in the future. Most acid is sold at 96 % grade.

9.2.2 Leaching and Purification

Calcine is ground in two ball mills and then leached in a circuit designed to accommodate the low-iron, high-silica levels of Century zinc concentrate. The first weakly-acid or 'neutral leach' is followed by a second stage at elevated temperature and acidity. The final washed and neutralised residue is filtered to produce Budel Leach Product ("BLP"), nominally containing 13% lead, 1250 g/t silver and 25 to 30 % silica. BLP is sold to lead smelters. To meet the specifications for lead/silver contents from customers for BLP, the Century zinc concentrate is sometimes "spiced" with small additions of silver-rich lead concentrate at the Queensland port site.

Neutral leach solution is purified by conventional zinc dust addition in two stages. In the first, zinc dust added at about 70°C cements copper and cadmium. A saleable copper cake (containing 50% to 60 % copper) and cadmium metal are separately recovered in subsequent leaching and electrowinning processes.

Second stage purification at about 85°C produces a cobalt-nickel cake with typically 7% each of cobalt and nickel at 600 tpa to 700 tpa; some is recycled and the balance can be sold. Purified solution is finally clarified for recovery of market zinc by electrolysis.

9.2.3 Electrolysis and Casting

The electrolytic cell-house with 432 cells is efficient and uses automated cathode handling and stripping. More recent designs with larger cathodes and improved automation may have lower unit costs. Electrolysis power consumption is near 3,100 kWh/t cathode zinc, while total plant power consumption is around 3,900 kWh/t saleable zinc. Current efficiency likewise is good at better than 92 %. Manganese sludge from cell and anode cleaning is recycled to become part of the concentrate feed blend.

In the casting plant, three electric induction furnaces serve a casting machine and three block casting stands which produce a range of zinc alloys and block shapes according to customer needs. Most products are despatched by road. A small proportion of total market zinc is transferred molten to the independently owned rolling mill on the site. Overall plant zinc recovery from concentrate to market zinc is better than 98 %.

9.3 Personnel and Safety

Budel presently has some 486 employees. AMC considers that significant further reduction in employee numbers is unlikely. Overall plant productivity was 437t market zinc per person-year in 2003. There are about 20 professional metallurgical staff, most being placed in a technical

group. Through the major change to a Century only feed, Budel has performed well, largely due to its strong technical capabilities.

Budel has an excellent safety record, although marred in 2002 by one bad incident. AMC supports the efforts for reduction in the number of workers with elevated blood lead levels (> 30 mg/dL) that typically range zero to five. Through December 2003, safety and health performance remains at about the same level as for 2003.

9.4 Smelter Feedstock

Budel is constrained in the selection of zinc feedstock by its 1993 agreement with government authorities which requires that operations must result in the complete elimination of solid residue retention. It is almost totally reliant on Century concentrate for the foreseeable future because very little other suitable concentrate is available. Budel is able to supplement concentrates with oxidic zinc materials, but purchased feed in 2002 and 2003 only accounted for a few percent of input zinc units. Most of such oxide feeds have significant levels of chlorine, forcing their processing through the roaster and limiting their rate of treatment.

The planned higher production from 2005 onwards will be met with Century concentrate and oxide. AMC considers that sourcing of comparable low-iron concentrate to replace Century after 2016 will be difficult. Continuation of plant operation may be possible through a combination of high-grade concentrate, increased oxide treatment, and technology change.

9.5 Production Levels and Capacity Constraints

Budel targets continuous steady-state operation. Process elements that are subject to routine shutdown for inspection and rebuild (such as roasters) have been constructed in multiples with associated buffer storages so that the cell-house can operate continuously.

Budel has performed consistently close to design capacity for some years, interrupted by two years of lower throughput due to initial problems with processing Century concentrate. Recent actual and planned annual production tonnages are shown in Table 29. The change to Century concentrate caused the reduction in by-product tonnages after 1999.

Table 29 Budel Historical and Planned Production

Market Products	1999 Actual	2000 Actual	2001 Actual	2002 Actual	2003 Actual	2004 Forecast	2005 Forecast
Zinc t	220,443	215,453	215,845	193,566	212,134	226,000	232,000
BLP t[1]			84,439	72,296	81,363	81,661	83,936
Cadmium t	758	711	594	419	480	513	551
Copper in cake t	1,274	752	602	503	596	609	645
Sulphuric Acid t	357,723	317,560	335,324	269,803	312,336	321,079	324,610

Note 1: Wet tonnes

Pre-Century the Budel plant was limited by cellhouse capacity. Change to Century concentrate moved the bottleneck to the roaster furnaces as a result of feed preparation problems and excessive heat generation during roasting. The introduction of the extra cooling capacity in the roasters during 2003 restored the roasting plant to its nominal capacity, shifting the bottleneck again to the cellhouse. With the introduction of extra diodes into the rectifiers during calendar 2003 Budel increased its cellhouse capacity to some 232,000 tpa market metal. Given the

capacity now available in roasting (particularly when mixing oxide material with the Century concentrate), Budel started an expansion project aimed at a cellhouse capacity of 260,000 tpa (equivalent market metal) by 1 January 2006, at a very preliminary capital cost of about €9M. Key aspects include control of halides from oxide feeds, and cellhouse capacity, particularly transformer rectifiers. Actual market zinc production through December 2003 is in accord with the forecast 226,000t for the year. The Budel Long Term Plan assumes production at around 260,000 tpa through implementation of the expansion project. AMC considers this production target to be achievable, given adequate investment as mentioned. Provision of oxide feed, and production of BLP at a marketable quality will remain important issues.

The main Budel products are SHG zinc and CGG alloy. Recent commissioning of a new alloying facility increases alloy capacity from 85,000 tpa to 100,000 tpa, allowing production of new types of high-premium alloy.

9.6 Plant Condition and Capital Plan

The Budel plant is well maintained and presents no apparent longer-term problems so long as maintenance and sustaining capital expenditure are kept to a reasonable level. Maintenance costs in 2004 (excluding roaster shutdown) are about €11.2M, or close to 16% of conversion costs. The capital expenditure plan to 2005 is shown in Table 30.

Table 30 Budel Capital Expenditure Plan

Capital Expenditure Class	2004 Forecast, €M	2005 Forecast, €M
Project	0.2	5.6
Campaign shutdown	1.6	2.0
Sustaining	3.4	4.4
Environmental	5.7	2.3
Total	**10.9**	**14.3**

In 2003, the major capital item was a fifth electrostatic precipitator (total €1.4M). A campaign shut down for mid calendar 2004 will cost about €3.6M. In the longer term, campaign shutdowns are programmed for 2010 and five years later, at capital costs of about €5.1M each. A provision of €8.5M is made over 2004 to 2006 for the expansion to 260,000 tpa capacity.

Century mine closure in 2016 is expected to require of the order of €50M expenditure to convert the plant to other concentrate feeds. AMC considers the availability of such suitable feeds to be most uncertain, and the sum allowed is notional.

9.7 Residue Disposal and Regulatory Constraints

Pursuant to the 1993 Agreement, no solid residues from operations have been retained on site since April 2000. All impounded residue is the product of the prior operations. As at the date of this report, the estimated mass of solid leach residue impounded at the site is:

Jarosite	2.7 Mt	in four ponds
Gypsum	0.25 Mt	in two gypsum ponds

Covering of the last jarosite pond was completed by December 2002. After sludge is transferred from historic wastewater clarification ponds, the last gypsum pond was to be covered by December 2005; however, negotiations may permit deferral till 2009. Budel has provided for the After-care Fund to pay for upkeep of the jarosite ponds, but the final cost is yet to be agreed with the Province.

Annual production of BLP is around 64,000 dry tonnes, and presently it is sold under long-term contracts with four European lead smelter customers. However, margin is very sensitive to silver content and price. Furthermore, if contained metal value should fall significantly, BLP would become uneconomic to treat and therefore difficult for Budel to sell. Port Pirie has guaranteed to receive and treat all BLP that is unsaleable elsewhere.

Although a mercury-selenium material was disposed of in Europe until mid-2001, this practice has ceased and the material is being stored on site in suitable containers. Budel is applying for a new export licence for this material.

Budel recently commissioned a major plant to process all aqueous effluent and groundwater recovered from bores around the site.

9.8 Smelter Services and Logistics

Budel is a major consumer of electricity, drawing approximately 115 MW on a continuous basis. The smelter is dependent on maintaining access to at least this amount of reasonably priced power. The present power supply contract runs to mid-2005. Electricity is relatively expensive as a consequence of government policy. Grid restrictions limit access to power from neighbouring countries where it is considerably cheaper: price differences in 2000 were typically €10/MWh to €15/MWh, down presently to €5/MWh to €7/MWh. Together with other major industrial power consumers in the Netherlands, Budel is actively seeking access to cheaper power. AMC considers this to be a most significant issue affecting Budel's economic performance.

Budel is well situated for transport. It receives concentrates from Antwerp by rail; it is beside a canal, and is close to major highways that provide links to major northern European industrial centres for product metal distribution.

9.9 Plant Economics and Financial Plan

Historically, Budel has been an efficient and relatively low cost producer. However, during the last year or so, its unit conversion cost significantly increased because of the decrease in production caused by its processing of Century concentrate. Production rate has now recovered.

A breakdown of actual and planned Budel site conversion costs (excluding transferred corporate costs) is shown in Table 31.

Much of Budel operating costs are fixed; the major variable cost correlated with zinc production is electrolysis power. Energy accounts for near 42% of Budel conversion cost. Unit conversion costs per tonne of zinc are sensitive to the production tonnage of market zinc, hence the importance of Budel's achievement of maximum production.

In 2003, raw materials cost (predominately of zinc concentrate) was equivalent to around €446/t (US $455/t) market zinc, to make its total unit cost of market zinc about €748/t (US $763/t). Zinc concentrate costs move in accord with the LME zinc price under the zinc concentrate pricing terms. In 2003, the purchase contract for Century concentrate was changed to 'world terms'.

Table 31 Budel Zinc Cash Conversion Cost (€M)

Year	2002 Actual	2003 Actual	2004 Forecast	2005 Forecast
People	27.4	26.0	26.4	27.4
Energy	26.2	30.8	30.0	33.0
Stores	8.0	7.7	8.3	8.0
External Services	7.8	6.2	5.1	5.2
Other	0.3	2.0	0.5	1.2
Total	**69.7**	**72.7**	**70.3**	**74.7**
Unit Cost €/t Zn[1]	339	302	268	293

Note 1: After credit for by-products

9.10 Summary of Key Attributes and Issues

Budel has a strong position with a number of aspects of its operation:

- It is a relatively large scale, modern plant with lower needs for capital expenditure.
- It has an opportunity for expansion at low capital cost, to improve its economic performance and market position.
- It is a residue-free operation, with defined closure plan, and good environmental performance.
- It has a strong market position with its Budel Zink brand and geographic proximity to northern European industrial centres.
- It has a secure concentrate source from Century till 2016, and can complement this with additional oxide feeds.

However, the history of smelting on the site and its location give rise to some continuing issues:

- Funding by Budel of the long-term site management, post closure, is close to final resolution.
- The Netherlands and Provincial governments take a very demanding and restrictive position environmentally (compared with other EC countries), and this constrains Budel's ability to sell or dispose of some by-products.

The future for Budel holds a number of risks or uncertainties:

- Arising from the Netherlands Government's actions, Budel suffers high power costs compared with those in neighboring countries. Actions by Budel, together other major power users, may bring significant improvement in this position.

- Treatment of concentrates is limited by roaster/acid capacity, so the proposed increase to 260,000 tpa capacity is founded on a corresponding increase in processing of oxide feeds. This may require additional capital expenditure to cope with halides.

9.11 Summary of AMC's Review of Forecasts

AMC has reviewed the Two Year Forecast, and concludes that this is in reasonable agreement with the Long Term Plan in terms of physical production, metal marketing, and with site costs. AMC's view is that Budel is performing well in zinc production, and should meet forecast for 2004. In the longer term, Budel plans to increase production to the order of 260,000 tpa, and this should be achievable with appropriate capital expenditure discussed in section 9.6.

In AMC's view, Budel's unit conversion costs per tonne of zinc should improve by about €14/t of zinc, compared with 2004, after this increase in production. This improvement is reflected in the Long Term Plan.

10 CLARKSVILLE ZINC SMELTER

10.1 Introduction

The Zinifex Clarksville zinc smelter is the group's newest electrolytic zinc smelter, being commissioned in 1978 on a green-field site 65 km northwest of Nashville, Tennessee. All Clarksville operations and residue stockpiles are located within this site, occupying about 24 ha. On the smelter site is a river port facility for barges handling the unloading of zinc concentrates and loading of sulphuric acid. Market metal production has increased in recent years to a little more than 110,000 tpa.

Process design was based on consumption of "Mississippi Valley" type ores, which make very clean, high-grade concentrates. Most of these mines are now closed, and only around 10% of Clarksville feed presently comes from the nearby Pasminco mine at Clinch Valley. Closure of Clinch Valley will occur in March 2004.

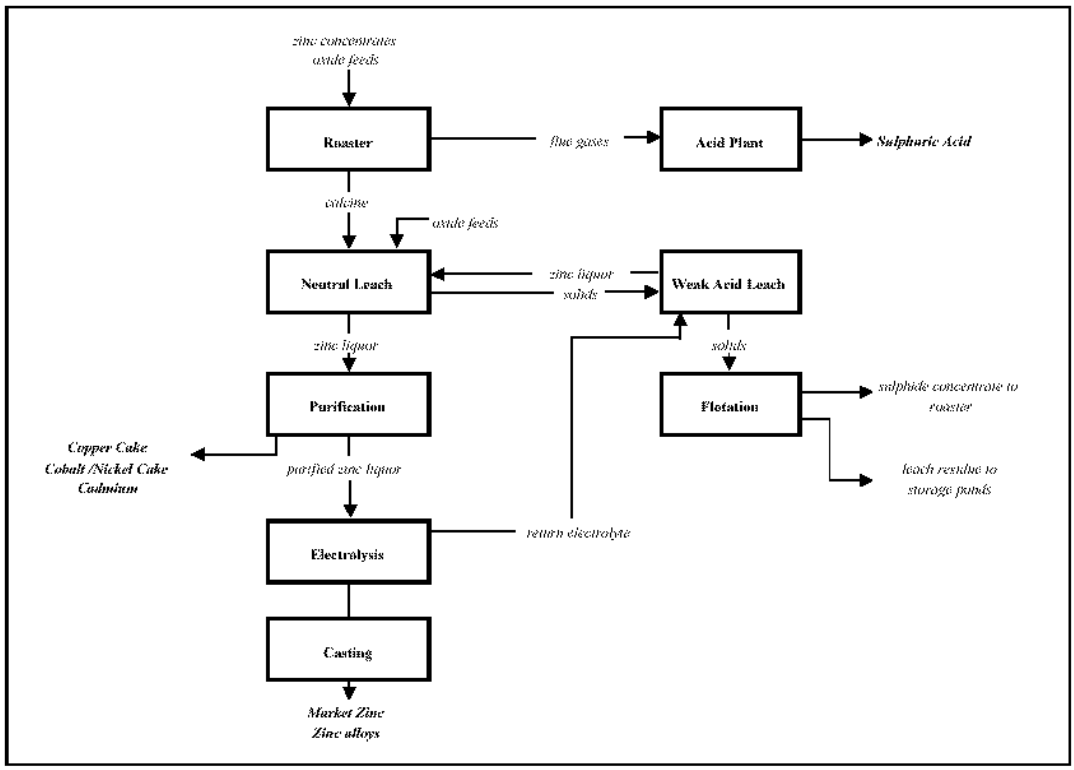
By-products include near 150,000 tpa of sulphuric acid, and 300 tpa to 400 tpa of cadmium metal. Other by-products include lead silver dross (300 tpa to 400 tpa), and low-grade copper-cobalt cake (500 tpa to 700 tpa).

The smelter is well located for supply to 80% of USA zinc demand, being situated within 800 km of Chicago, Detroit and much of USA's industrial heartland. Around 50% to 60% of product zinc is SHG; most of the remaining zinc product is CGG alloy; other zinc alloys and a little zinc dust have been sold on a trial basis.

10.2 Process Description

Figure 21 is a simplified flowsheet of the Clarksville plant. Zinc concentrate from Clinch Valley and external sources is unloaded from barges and conveyed to a storage building. Other materials are received by barge, truck and rail. Concentrate is blended by loader skips and screened before conveying to a 400t roaster day bin.

Figure 21 Clarksville Simplified Flowsheet



10.2.1 Roasting and Acid Production

Concentrates are roasted at about 960°C in one standard fluid-bed roaster with a hearth area of 65m^2, linked with a waste heat boiler followed by gas cleaning cyclones and precipitators. Product calcine is collected in bed overflow and from carryover in the boiler and gas train. Calcine typically has less than 0.7% sulphide sulphur. It is cooled in a drum cooler and then ground in a ball mill. Fluidising air to the roaster is enriched with 2% oxygen. The roaster has an average availability of 93%. Major maintenance shutdowns occur at 18-month intervals, with typical downtime of 14 days. Generated steam is used in process heating and with some turbine drives. Mercury is removed from clean gases by a standard chloride process and the small amount of residue recovered is disposed in one of the storage ponds. Roaster gases with 6% to 8% sulphur dioxide are then processed in a double-catalysis, double-absorption sulphuric acid plant, achieving 99.96% sulphur removal. Sulphuric acid produced is sold locally for a good economic return. Acid can be despatched by road, rail and barge.

10.2.2 Leaching and Purification

Calcine is stored in four bins each of 1,800t capacity.

The leaching circuit is a relatively simple circuit designed to process high-grade concentrates. Leaching uses two stages, neutral leach and weak-acid leach. High zinc recovery is achieved given the low iron content of feed concentrates. However, the design limits zinc recovery with treatment of concentrates with high iron or silica levels. Process modification would be needed for such concentrates.

Because iron (as ferrite) in calcine is not leached, soluble iron sulphate is added in leaching for impurity control. In neutral leaching, calcine is leached in a series of tanks to a final acidity of pH 5. Iron in solution precipitates, removing most of the impurities. The slurry is thickened and the solids are reground and pass to weak-acid leach, in which more zinc is leached into solution. The final slurry is thickened and the solids are filtered. Some of the sulphides remaining in the solids are recovered by flotation and returned to roasting. The final residue is stored in lined ponds.

"Off-grade" germanium concentrate (about 20,000t) previously produced in treating concentrate from the now-closed Pasminco mine, Gordonsville, is stored separately in a pond for possible sale.

Neutral leach solution at 50°C to 60°C is purified in two stages using the conventional zinc dust purification process. In the first, low-temperature stage, zinc dust is added to precipitate cadmium and copper, producing cement solids that are pressure-filtered. The solids are re-leached for zinc and cadmium and the final copper cake with around 55% copper is filtered for sale. The leach liquor passes to the cadmium plant, where after stages of precipitation, leaching and filtration, cadmium metal is recovered by electrolysis in eight cells. The metal is melted and cast as balls for sale.

Solution from first-stage purification is heated to 90°C for second-stage solution purification, in which more zinc dust is added together with copper sulphate and antimony tartrate to make a cobalt-rich cementate. This is pressure-filtered, re-leached for zinc and finally filtered for sale. This cake has 1% cobalt and up to 20% copper. Overall zinc dust consumption was about 5.5% of cathode zinc, but consumption has decreased since treatment of Gordonsville concentrate ceased.

The final purified solution with 160 g/L zinc is clarified in a conical settler, before passing to electrolysis.

10.2.3 Electrolysis and Casting

The cell-house has 208 cells arranged in eight rows. Each cell has 48 cathodes with an effective area of 2.6m^2 per aluminium cathode. Anodes are of a standard lead-silver alloy. Current efficiency is normally better than 91% and power consumption is around 3,150 kWh/t cathode. The three transformer rectifiers that power the cell-house can be applied flexibly to supply half

the cell rows at a current density of up to 560 A/m^2, and half at up to 600 A/m^2. Spent electrolyte has 55 g/L zinc and 180 g/L acid. Some spent acid is returned to leaching; the balance is recirculated after addition of purified solution.

In an automated process, cathodes are removed for stripping on a nominal 48-hour cycle. Anodes and cells are cleaned on a 21 to 28 day cycle and the obtained manganese mud is recycled. Strontium carbonate, licorice and gelatin are added to electrolyte to improve the quality of cathode zinc. All cathode zinc is produced as SHG. It is melted in a single electrical induction furnace and cast into blocks and 25 kg slabs. Zinc is also alloyed in a separate small furnace as required. Market zinc is delivered by road truck and rail daily; minimal stocks are held on site.

Historically, "first pass" zinc recovery from concentrate to market metal was about 95%, a result reflecting the treatment of high quality concentrates, but recovery is expected to be lower with higher-iron feeds. Additional zinc recovered through the effluent treatment plant increases overall zinc recovery by about 1,700 tpa.

Zinc dust is made by taking molten cathode zinc to a small induction furnace, from which the zinc is atomised by compressed air.

10.3 Personnel and Safety

The zinc plant employs about 240. In addition, there are some 20 corporate staff on site, many of whom provide services to the zinc plant operation. Employee turnover is very low. In addition there are about 18 full-time equivalent contractors. Clarksville productivity in 2004 is forecast to be about 390t market zinc per man-year (based on all site employees plus contractors).

In process operational and technical support positions, only eight staff have professional technical qualifications. Although Clarksville has performed well in the past, AMC considers that with Clarksville's reliance on purchased feeds in the future and consequent changes to process operations, a small increase in technical staff numbers is desirable.

Clarksville safety performance has improved significantly compared with the 1997-1999 period, when MRIFR averaged 69 and LTIFR averaged 50. Unfortunately, one fatality occurred in January 2002. After a big effort with training programs, MRIFR and LTIFR improved to 35 and 12 respectively for 2003, and have further improved during 2004. At zero, the number of workers with elevated blood lead levels is an excellent performance.

10.4 Smelter Feedstock

Until recent years, Clarksville used only that suite of Mississippi-valley type zinc concentrates (zinc >60%, iron <2%, silica <1%) for which the smelter was designed. Decline in the supply from local sources has forced Clarksville to source alternative feeds with mid-range iron levels.

Currently, 10% of Clarksville concentrate comes from Clinch Valley. The balance is imported, mainly from Australia, Central and South America. Until 2002, Clarksville sourced around 53% of its feedstock from regional Tennessee mines, mostly now closed. Gordonsville closed in June 2003, and Clinch Valley will close in March 2004. Concentrate supplies (averaging zinc 57%,

iron 3.3% and silica 2%) are secure for calendar 2004, including Century at 19%. Difficulties were encountered in managing low concentrate inventory with the supply line through New Orleans, but good management procedures are in hand. Clarksville is experiencing problems in reconciling paid-for tonnages with measured plant recoveries; the problem is recognised, and AMC considers this to be an area needing attention. There remains considerable uncertainty as to the actual smelter zinc recovery.

Century was successfully trialed at up to 30% of charge. Some problems in zinc recovery from the higher silica input are being addressed through minor process changes. Measures to address this are being taken. Higher NO_x in product acid can be removed by sulphamic acid addition, or NO_x-containing side-stream acid can be segregated and sold. Clarksville plans to treat some zinc oxides in 2004, and an increased tonnage in 2005, to be sourced from USA, Mexico and Europe. A small proportion can be fed direct to leach, thereby bypassing the roaster and its capacity limitations. However, halide levels force most to be roasted. Trials of oxide in roaster feed were successful at moderate rates. Oxide washing to remove halides is possible, but costs and metallurgical performance have yet to be evaluated.

AMC considers that Clarksville is reasonably secure in its concentrate supply position. Treatment of a higher proportion of oxides is needed if Clarksville is to increase zinc production to the longer-term forecast rate of 119,000 tpa.

10.5 Plant Performance and Capacity Constraints

Production in the four financial years to June 2002 averaged 110,000 tpa market zinc but the average is distorted by a Gordonsville mine strike in 1999 and remelt of 5,000t zinc in 2001. Actual and forecast Clarksville production is presented in Table 32.

Table 32 Clarksville Historical and Planned Production

Market Production	1999 Actual	2000 Actual	2001 Actual	2002 Actual	2003 Actual	2004 Forecast	2005 Forecast
Zinc t	100,882	110,113	118,188	112,200	110,249	108,300	115,600
Cadmium t	377	383	376	392	297	350	370
Acid t	141,161	143,890	145,511	144,707	145,862	152,263	159,700

Further increases in production will require capital investment to overcome recognised capacity constraints:

- In roasting, sulphur-burning capacity is limited by the acid plant to production of about 115,000 tpa zinc metal from calcine. In addition, treatment of concentrates with high heat of combustion, such as from Century, may be limited by roaster and hot gas cooling capacity.

- Leaching and purification have excess capacity for the present mix of feeds. However, much higher iron in feed (greater than 6%) may need an additional hot acid leach ("HAL") stage to achieve economically satisfactory zinc recovery. Treatment of additional oxides is preferred. Other options are being studied, including issues arising from higher silica in feed.

- Electrolysis is constrained by electrolyte cooling capacity in summer. Power price seasonally increases in summer and the high marginal cost of power causes short-term cutbacks in the cell-house. Clarksville estimates of cell-house capacity are 125,000 tpa and higher. Space for two extra cells per row allows a 7.7% increase in capacity if production is unconstrained by other factors.

Clarksville zinc production YTD through December 2003 was 51,800. AMC considers that the forecast production of 108,300t for 2004 is achievable, with the planned treatment of zinc oxides. The production plan of 115,600 tpa market zinc in 2005 should also be achievable given input of the planned tonnage of oxidic feed. Further expansion of Clarksville is proposed to be in stages with capital expenditure in roaster/acid and cellhouse. However, the proposal has not progressed to inclusion in the Long Term Plan.

10.6 Plant Condition and Capital Plan

The Clarksville plant is generally well maintained and the site is clean and well presented. Capital expenditure during the past few years was held at a low level. There are some areas of concern, such as cooling tower bases, but these are recognised by Clarksville and are receiving attention. Capital expenditure was held to US$0.2M in 2002, compared with US$5M in 2001 and US$2M in 2000. The capital expenditure plan to 2005 is given in Table 33.

Table 33 Clarksville Capital Expenditure Plan

Capital Expenditure Class	2003 Actual, US $M	2004 Forecast, US $M	2005 Forecast, US $M
Project	0.0	0.0	1.0
Campaign shutdown	0.7	1.8	1.5
Sustaining	1.4	1.0	1.0
Environmental	0.0	0.0	0.0
Total	2.1	2.8	3.5

Spending on maintenance has remained steady over the last three years in the range US$9M to US$10M; this is about 18.5% of conversion costs, or just under US$85/t zinc production. A maintenance improvement program aims to both reduce costs and increase plant utilisation.

Clarksville's planned capital expenditures remain modest in the short term. An allowance of US$1M is made in 2005 towards achieving plan capacity. The Long Term Plan provides restoration of sustaining capital expenditure to around US$4 Mpa to US$5 Mpa over the longer term. AMC is concerned that sustaining capital expenditure may be lower than necessary for long-term reliable operation.

10.7 Residue Production and Disposal

Clarksville operates under the Bevill Amendment to the USA Environmental Protection Agency's Resource Conservation and Recovery Act ("RCRA"). This Amendment allows Clarksville's leach residues to be held in site impoundments as non-hazardous solid waste without further processing.

All residues from the leaching/purification process are stored on site in five lined ponds. Clarksville strategy is to continue treating high-grade concentrates so that the Bevill exemption is maintained. Treatment of high-iron concentrate could require adoption of hot acid leaching: this would cause Clarksville to lose protection under the Bevill Amendment and require disposal of these future residues as a hazardous waste at considerable additional cost. Residue disposal would then cost an estimated US$165/t for off-site secure placement.

Storage Ponds 1 and 4 are full; Pond 5 was constructed in 2001 and is expected to be full by early 2008. Capital provision is made in the plan for the next pond. Pond 2 is used for water collection as a feed to the effluent treatment plant; Pond 3 is for lower-grade germanium concentrate that may be sold in the medium term. Some stockpiled gypsum is being reprocessed for sale.

Estimated impounded masses of solid waste are presently:

Weak acid leach residue	160,000 dry t
Low-grade germanium concentrate	20,000 dry t

All plant effluents are treated with lime to precipitate hydroxides. Some electrolyte is bled from the plant to control its magnesium levels and this flow is partly neutralised with limestone or a stockpiled cake, before joining the hydroxide precipitation step. From that step, the slurry is thickened and the overflow, being of acceptable quality, is discharged to the river. The solids are releached with acid to recover about 1,700 tpa of zinc, and a commercial grade gypsum product is sold to cement and wallboard plants.

Sulphur dioxide produced in roasting operations is the most critical gaseous process effluent. As noted above, the acid plant recovers a sulphuric acid by-product. The residual discharge contains the equivalent of 0.04% of sulphur input. Acid plant stack gas contains less than 300 ppm sulphur dioxide.

10.8 Smelter Services and Logistics

Clarksville is a major consumer of electricity, drawing up to 65 MW, mainly for electrolysis. The Tennessee Valley Authority ("TVA") supplies power through two lines at 161 kV under a contract with three pricing components: 16.25MW of firm power, 16.25MW of limited interruptible, and the balance is variable price interruptible. Clarksville gains significantly by maintaining a contract allowing an interruptible load. The overall power cost from TVA is low by US standards. The earliest deregulation of TVA is put at three to five years.

Zinc concentrates are received by river barge. Rail facilities are also available. Clarksville owns and operates a river port for barge traffic, connecting via the Ohio and Mississippi Rivers to the Gulf of Mexico. The port comprises a 405m long dock with modern handling equipment capable of receiving barges up to 61m long and 1500t capacity and one acid loading berth. Product zinc is dispatched by road and rail.

10.9 Plant Economics and Financial Plan

A breakdown of actual and planned Clarksville conversion costs (excluding raw material feeds) is given in Table 34.

Table 34 Clarksville Conversion Cost – US$M

Year	2003 Actual	2004 Forecast	2005 Forecast
People	15.0	15.5	14.9
Energy	14.1	14.6	15.2
Stores	11.9	11.0	10.6
External Services	2.1	3.6	5.2
Other	7.5	3.3	1.8
Total	50.6	48.0	47.7
Unit Cost US$/t Zn[1]	385	378	381

Note 1: After credit for by-products (but no germanium credits)

Energy amounts to around 32% of site conversion costs. Clarksville forecasts no increase in real-terms power price. Although the Tennessee region, supplied by the TVA, is not subject to the power price pressures as in the western USA, AMC considers that some long-term power price increase is likely.

With closure of the Pasminco US mines, Clarksville will face higher costs for imported zinc concentrate and will need to secure increased tonnages of zinc oxide materials. AMC considers that the net result will be higher feed costs.

While in AMC's view, Clarksville is an efficient zinc producer, with low manning and good metallurgical performance, its economic competitiveness relative to Budel and Hobart is limited by its small size. With its strategic location in the US, Clarksville is able to command valuable premiums for its products. The key elements to its longer term performance lie in sourcing competitively priced raw material feeds of acceptable quality and its ability to cope economically without loss of its Bevill protection.

10.10 Summary of Key Attributes and Issues

Clarksville has a strong position with a number of aspects of its operation:

- Although relatively small, Clarksville is a clean, modern zinc smelter.
- It is well located to serve 80% of major US zinc consumers, and its position has good road, rail and barge links.
- It has a profitable market for sulphuric acid.
- It has good metallurgical and environmental performance.
- Its relative costs are improving with the weaker US dollar.

However, Clarksville's history and location give rise to some continuing issues:

- Its process design limits its ability to treat lower-grade zinc concentrates economically, so makes a preference for better concentrates that are more limited in availability.

- Although it has relatively low power costs by US standards, it has no bargaining power with the TVA.

The future for Clarksville holds a number of risks or uncertainties:

- Possible (though presently unlikely) deregulation of TVA could lead to power price increases.

- After closure of Century mine in 2016, an equivalent tonnage of higher-grade zinc concentrates will need to be sourced.

- Clarksville offers the potential for expansion and this would probably be founded on treatment of oxide feeds. The capital cost and metallurgical requirements are yet to be determined.

- Smelter performance in terms of zinc recovery is uncertain, and will remain so until the paid for zinc in concentrate is reconciled with zinc production by the present investigation.

10.11 Summary of AMC's Review of Forecasts

AMC has reviewed the Two Year Forecast, and concludes that this is in reasonable agreement with the Long Term Plan in terms of physical production and metal marketing, and with site costs. Based on Clarksville's production performance YTD January 2004, AMC's view is that its zinc production forecast for 2004 remains achievable.

In the longer term, Zinifex projects a continuation of present unit conversion cost in real terms at production rate of around 119,000 tpa with capital costs as discussed in 10.6. AMC has reviewed the Long Term Plan and subject to its reservation about sustaining capital, it considers that plan to be reasonably achievable.

11 SOURCES OF INFORMATION

AMC consultants and sub-consultants visited all the material operations of Zinifex both in 2002 prior to the preparation of the draft report dated February 2003 and again in the latter part of 2003. The consultants held discussions with site management staff and reviewed all material records and documents available from site. In addition AMC held discussions with head office management staff and reviewed other material records and documents provided to it from head office. A data room was established and lists of all the documents held in that data room were provided to AMC. These were reviewed to the extent that it was considered material after assessment of information provided from site and from head office.

Material references are listed in Appendix A. Diagrams for this report have been sourced from Zinifex.

12 QUALIFICATIONS AND LIMITATIONS

AMC is a wholly owned subsidiary of Ausmincon Holdings Pty Ltd and is a firm of mineral industry consultants whose activities include the preparation of due diligence reports and reviews of mining and exploration projects or equity and debt funding and for public reports.

The contributors to this report are listed in Appendix B.

Apart from the draft independent technical report prepared in February 2003, AMC has carried out a number of consulting assignments in recent years concerning assets of Zinifex and of Pasminco. Following the appointment of an Administrator to Pasminco, AMC was engaged to assist Resource Finance Corporation Limited in preparing a strategic review of Pasminco assets. The primary AMC consultants involved in that review were not involved in the preparation of this report. Sub-consultants RA. Cantrell and GA. Buckett worked on that review.

In recent years, AMC has been employed by Century in relation to mine scheduling and to ore reserve estimation, by Pasminco in regard to Dugald River pre-feasibility work including mine planning and resource estimation and by Rosebery in regard to general mining engineering advice. The principal AMC consultants involved in these assignments were not involved in the preparation of this report.

Sub-consultants RA. Cantrell and HJ. Boughen have previously consulted to Century in regard to process design, feasibility work and other process issues. HJ. Boughen has recently been asked to provide services to Rosebery in regard to process developments and business improvements.

In this assignment and in previous assignments for Pasminco and its operations, AMC has acted as an independent party. Neither it nor the contributors to this report have any shareholdings or other interests in Zinifex or in Pasminco (other than small shareholdings stated to be of no practical value) or in any of the assets reviewed. Nor do they have any pecuniary interest, association or employment relationship with Zinifex or Pasminco other than the payment of a fee according to normal per diem rates and out-of-pocket expenses for consulting services including preparation of this report. AMC's fee is not contingent on the outcome of the transaction subject to this report.

The conclusions in this report are effective as at the date of the report and consider actual operating results until 31 December 2003. However those conclusions could change in the future depending on changes in metal prices and/or results and technical changes at the operations and/or results of exploration. AMC disclaims responsibility for any changes that may have occurred after the date of this report.

AMC warrants that in the preparation of this report it has taken reasonable care in accordance with standards ordinarily exercised by members of the profession generally who practice in the same locality and under similar conditions. AMC accepts no liability whatsoever in respect of any failure to exercise a degree or level of care beyond such reasonable care. No other warranty, express or implied, is given, save where necessarily incorporated by statute. The report has been prepared in accordance with the scope of work and for the purpose outlined in the engagement

letters dated 9 September 2002 and 17 December 2003 and should be read in full. No responsibility is accepted for the use of any part of this report in any other context or for any other purpose or by third parties. This report does not purport to give to legal advice.

In preparing this document, AMC has relied on information and reports provided to it on behalf of Zinifex. AMC accepts no liability in respect of such data or information, save that it has exercised reasonable care as set above) in the use of such data and information. AMC makes no representation and gives no warranty as to the accuracy or completeness of the data or information contained in any information or reports that it has relied on. In the letter of engagement, Pasminco agreed to comply with those Obligations of the Commissioning Entity under the Valmin Code as set out in paragraphs 27 to 29 of that Code including that to the best of its knowledge and understanding, complete accurate and true disclosure of all relevant material information would be made. On behalf of Zinifex, we have been advised in writing that to the best of its knowledge, all material information relevant to the projects described in our report has been provided to us. We have provided to the planned management of Zinifex a draft report to enable correction of any factual errors and notation of any material omissions. The views, statements, opinions and conclusions expressed by AMC are based on the assumption that all data provided to it on behalf of Zinifex and by Pasminco are complete, factual and correct to the best of those companies' knowledge.

AMC has given its consent to the inclusion of this report in the IOM and, by reference, in the Prospectus in the form and context in which it appears in the IOM but makes no representation in relation to, and takes no responsibility for, any part of the documents other than those parts containing this report or those parts containing references to AMC and statements attributed to it to which it has otherwise given its consent.

To the extent permitted by law, AMC accepts no liability whatsoever, whether in contract, in tort or negligence or otherwise, for any loss or damage (including consequential or economic loss or damage) arising as a result of any person other than the named addressees acting or refraining from acting in reliance on any information, opinion or advice contained in this document.

No person (including the clients) is entitled to use or rely on this document and its contents at any time at which any fees (or reimbursement of expenses) due to AMC are outstanding and, in those circumstances, AMC may require the return to it by any person of all copies of this document and any part of it in their possession.

On behalf of Zinifex and itself, Pasminco has indemnified us in regard to damages, losses and liabilities related to or arising out of our engagement other than those arising from wilful default, negligence or unlawful act on our part.

The signatories of this report are corporate members of the AusIMM and are bound by its code of ethics.

APPENDIX A – References

The following listing records material references grouped under Corporate and General, Mines and Exploration and Smelters.

In addition to the items listed, AMC's assessment relied on numerous emails, memos, spreadsheets, charts, plans and sections, and presentation material provided for its due diligence visits to sites.

ZINIFEX CORPORATE AND GENERAL

Annual Reports, Pasminco Ltd.

Australasian Mining and Metallurgy: The Sir Maurice Mawby Memorial Volume, Vols 1 and 2. Monograph 19, The Australasian Institute of Mining and Metallurgy, Melbourne (chapters on Hobart and Port Pirie, Woodcock, J. T. and Hamilton, J. K. (eds.) (1993)

Business Unit Monthly Reports from the Chief Operating Officers of each mine and smelter over the period Sep 2002 to December 2003

Operations Summary reconciliation [v.81 to v.84].xls; Pasminco Ltd; 24 January 2004

Pasminco Management Presentation: 9 *.ppt* files covering Group, mines and smelter operations; Pasminco Ltd; 17 December 2003

Pasminco Strategic Model V.085.xls; Pasminco Ltd; 24 January 2004

Pasminco Strategic Model NOVONE. xls; Pasminco Ltd; 24 November 2003

Project Galvanise Financial Model V.081; 11 *.xls* files covering each mine and smelter plus Group consolidation; Pasminco Ltd; 24 November 2003

Policy and Procedures – Capital Management System, Issue II, Pasminco Ltd, 4 June 2003

Project Galvanise Financial Model V.083; 13*.xls* files covering each mine and smelter plus Group consolidation; Pasminco Ltd; 19 January 2004

Project Galvanise Financial Model V.085; 13 *.xls* files covering each mine and smelter plus Group consolidation; Pasminco Ltd; 24 January 2004

Project ReGalvanise Environmental Due Diligence; URS Australia Pty Ltd; 21 January 2004

Reconciliations between Financial Models V.081 and V.084; 9 .xls files covering each mine and smelter; Pasminco Ltd; 24 January 2004

Summary of Changes from Plan 2003-04 to Project K; Pasminco Ltd; 23 January 2004

V84 IPO Dec '03 Forecast FINAL as at 24 Jan 04. xls; Pasminco Ltd; 23 January 2004

Zinc production – a survey of existing smelters and refineries, in *Zinc – Lead 2000*, TMS, Warrendale, 205-225, James SE, Watson JL and Peter J (2000)

ZINIFEX MINES AND EXPLORATION

Century Mine

2003/04 First Quarter Performance; 12 pp page Presentation; 31 October 2003

2003/04 Plan Working Copy.xls; (2004 capital program); Century Mine, 28 January 2004

Actual physical and financial performance – Century Years '02 and '03; Pasminco Ltd; 28 January 2004

Century 2003/04-3 year plan Rev NL.xls; (capital program 2005 to 2007); Century Mine, 28 January 2004

Century General Manager Presentation; 30 pp pages; 17 December 2003

Century Mill Recovery; IPSMSDCE 0001 031008 Century Maximum Recovery_v11.doc; 26 January 2004

Century Mine Site Presentation to AMC; Pasminco Ltd; 27 pp pages; November 2003

Century Regional Exploration Opportunity, 25 November 2003

Century Reserve Reconciliation – 24 Months to March 2003

Century Truck Loader Review; AMC Consultants Pty Ltd; 19 November 2003

Exploration Targets, Century, A. Lorrigan, 19 January 2004

Finance Memorandum Pasminco Century Mine; Pasminco Ltd; 20 November 2003

January 04 Forecast Century File.xls; Century Mine: 28 January 2004

January 04 Forecast-Production.xls; Century Mine; 4 February 2004

Karumba Port Facility Monthly Reports; Century Mine, Various to October 2003

Karumba Port Operations, Presentation to AMC; Pasminco Ltd; 6 pp pages; November 2003

Metallurgical Process Control, Power, Reagents and Media Budget 2004-2006 version 3.xls; Century Mine, 10 August 1003

Metallurgy Department Monthly Reports; Century Mine, Various to December 2003

Monthly Mining Physicals 03-04 corrected.xls; Century Mine; 29 January 2004

Pasminco Century Mine, 2003 Mineral Resource Statement, 15 June 2003

Pasminco Century Mine, Medium Term Planning; AMC Consultants Pty Ltd; October 2003

Pasminco Century Short Term Scheduling, AMC Consultants Pty Ltd,24 February 2004

Process Design Criteria Revision 6; Pasminco Century Mine Ltd, January 1999

Schedule workbook 07NOV03.xls; Century Mine; November 2003

Strategic Cost Model 151103 - Jan Mining.xls; Century Mine; 29 January 2004

Rosebery Mine

2001, 2002 and 2003 Annual Resource/Reserve Statements, Rosebery Mine.

2002/03 Economic Parameters for Mine Planning, 15 February 2002

2002/03 Scheduling Parameters for Mine Planning, 15 February 2002

3 year mine plan. Spreadsheet.

Actual physical and financial performance – Rosebery Years '02 and '03; Pasminco Ltd; 28 January 2004

AMC Report No 198061, *Pasminco Rosebery Mine, Life of Mine Strategic Study*, May 1999

CD "Information pack Pasminco Rosebery Mine", 6 August 2001

Draft AMC Report, *Underground Benchmarking Report, Pasminco Rosebery Mine*, August 2002

Draft Capital Expenditure Plan June 2002

Draft Mill Operating Cost Plan June 2002

Estimated Economic Reserves for Rosebery Mine as at the end of March 2002 for Amortisation, 10 April 2002

Estimated Economic Reserves for Rosebery Mine as at the end of March 2003 for Amortisation, 10 April 2003

Estimated Economic Reserve Update – 31 Oct 2003. Memo. Peter Edwards to Gavin Springorum. 11 November 2003.

Grinding flowsheet.doc, copper flotation flowsheet.doc, current lead flotation flowsheet.doc

and zinc flotation flowsheet.doc

Inferred Resources to Reserves Conversion Factors, 6 November 2003

Memo. Ray WedMaier to Paul Shipp 6 October 2003. *"Costs to be used in economic evaluations."*

Mill production plan 2003/2004, 2004/2005, 2005/2006 updated 7 November 2003

Mine Longsection showing 2003/04 mine production plan.

Mobile Equipment Availability/Utilisation. Table of Jun-03 and YTD data.

Reports on Enterprise Agreements

Rosebery Improvement Project, Sections 2.1 and 3.6

Rosebery Mine Lease 28M/93, Annual Report for Period ending 30th June 2002, 29 July 2002

Rosebery Block Model Implementation, August 2001

Site Cost Reports and Site Unit Cost Reports, period ending 30 June 2003 and 30 November 2003

Site manning levels summary, October 2003

Surface Decline Remnants Mining Proposal, undated (?early-mid 2001)

Surface Decline – Remnants Mining proposal. Stage II: Capital Application

Treatment Report June 2003 to November 2003 (6 reports)

Various 2001/2002 memos on Ore Reserve/mill reconciliation

Dugald River

A note prepared by Pasminco describing the AMC pre-feability study, 2001

Dugald River, 500,000 tpa Study, February 1992

Dugald River, Mining at 500,000 tonnes per annum, January 2002

Dugald River, Project Scoping Study, October 1992

Dugald River, Resource Sensitivity Study, AMC, July 2000

Dugald River Environmental Management Overview Strategy, January 1998

Dugald River Environmental Monitoring Program Report 2000/2001, June 2001

Preliminary Assessment Dugald River Mineral Reserve Model, AMC, February 2000.

Internal Pasminco Memorandum considering certain techniques for addressing the presence of manganese

Pasminco, Dugald River Underground Pre-feasibility Study, AMC, March 2000

Pasminco Limited, Dugald River, Geological Report, Lutherborrow 2000

Pasminco Limited, Dugald River, Resource Estimate at December 1999, Lutherborrow

Pasminco Limited, Dugald River Zinc Lead Project, summary document 16 October 2003

Other reports and studies prepared in respect of Dugald River

Report by Chris Greet of Pasminco entitled Metallurgical Development of Dugald River dated 20 August 2001, and supporting references

ZINIFEX SMELTERS

Hobart Smelter

Actual physical and financial performance – Hobart Years '02 and '03; Pasminco Ltd; 28 January 2004

Asset Overview – Hobart .doc; Pasminco Ltd; 25 November 2003

Conversion of the Pasminco Hobart Smelter to paragoethite; in *Zinc and Lead Processing*, Met Soc CIM, Montreal, 439-453; McCristal TG, Manning J and Sanderson I, 1998.

Development of a new zinc dust purification process for the Pasminco Metals – EZ plant; in *Zinc & Lead '95*, Sendai, 631-644; Adams RW, Hodder DG and Martin GJ, 1995.

Effluent treatment system at Pasminco Metals – EZ; in *World Zinc '93* The AusIMM, Melbourne, 385-389; Lockley JV, Palmer DJ and Newman OMG, 1993

Feasibility Assessment for Century Conversion .doc; Pasminco Ltd; 3 December 2003

Hobart flowsheet options and model review; Mwaba C; 2 August 2002;

Hobart Re-Forecast variances v81 to v84 .xls; Pasminco Ltd; 24 January 2004

Materials Balances: 2001-2002 Actuals, Forecasts 2002-2003, 2003-2004, 2004-2005; Pasminco; 2002.

Pasminco Hobart Smelter – Presentation to AMC; 11 December 2003

Pasminco Hobart Smelter 2002/2003 Plan; 2002.

Pasminco Hobart Smelter, 10-year capex Base (Constrained) case; in IPSMIAHO 0001 Strategic Model – Capital Listings – Hobart .xls; Pasminco Ltd; 18 December 2003

Pasminco Hobart Smelter process description; c. 2000.

Pasminco Hobart Smelter environmental management strategy: by-products and process wastes; 2002.

Pasminco Limited Internal Environmental Audit: Wastes residues and by-products Hobart and Port Pirie June 2001; Pasminco, 2001.

Production of zinc in the modernised Pasminco Metals – EZ plant, Hobart, Tasmania; in World Zinc '93, The AusIMM, Melbourne, 287-293; Pammenter RV, Gilmour R and Salmon PT; 1993.

Reconciliation for Hobart Smelter between Strategic Models V.081 and V.084; in Smelters Reconciliation v81_v84.xls; Pasminco Ltd; 27 January 2004

Revision to Pasminco Hobart Smelter Capital Plan (December 2002) Century Conversion, PLR Handling, Technical Facilities; Pasminco Ltd; 3 December 2003

Port Pirie Smelter

Actual physical and financial performance – Port Pirie Years '02 and '03; Pasminco Ltd; 30 January 2004

Allocation of smelter conversion costs between metals at Port Pirie; Pasminco Ltd; 23 January 2004

Annual Environment Report 2000-2001; Port Pirie; 2002.

Asset Overview – Port Pirie .doc; Pasminco Ltd; 24 November 2003

BHAS copper-lead matte treatment plant; in *Non-Ferrous Smelting Symposium, 100 Years of Smelting and Refining at Port Pirie*; The AusIMM Melbourne; 153-157, Meadows NE and Valenti M, 1989

Capital Plan, 02/03 to 04/05;Port Pirie Smelter; 2002.

Commissioning and optimisation of the new lead and silver refinery at the Pasminco Port Pirie smelter; in *Lead-Zinc 2000*; TMS, Warrendale, 187-201, Kapoulitsas et al, 2000.

Electrolytic zinc at Port Pirie; in *Zinc '83*, CIM Montreal; paper 25.1, Johnson RD, Palumbo LD and Smith GDJ, 1983.

Electrolytic zinc plant operations at Port Pirie; in *The AusIMM Conference, South Australia, June, 1975*; The AusIMM Melbourne; 211-224, Hart DH, McNicol JH and Martin JD, 1975.

Larox filtration of leach plant residue at the Port Pirie lead smelter; in *The AusIMM Bulletin*, No.1 April; 44-46, Wauchope AMH, 1991.

Long term capex Strategy Development Plan; Strategic Model – Capital Listings – Port Pirie .xls; Pasminco Ltd; 18 December 2003

Metal recoveries: lead, silver, gold, copper; Port Pirie Smelter; 2002.

Recent changes to Pasminco's lead smelter at Port Pirie; in *Zinc and Lead Processing*, CIM, Montreal, 455-469; Kretschmer B, Burgess G and Sanderson I; 1998.

Recent improvements to operations and control of Pasminco Metals BHAS zinc plant; in *World Zinc '93*, The AusIMM, Melbourne, 249- 255; Bannear MA, Nolan DP and Balales M.

Research and process development at Port Pirie; in *Minprex 2000*, The AusIMM, Melbourne, 103-115, Grant RM, 2000.

Pasminco Limited Internal Environmental Audit. Wastes residues and by-products Hobart and Port Pirie June 2001; Pasminco; 2001.

Pasminco Port Pirie Smelter: 2003/2004 Plan; July 2003

Pasminco Port Pirie Smelter FY2004 Capital Plan; Rev v.15; 10 December 2003

Pasminco Port Pirie Smelter Site Overview for AMC visit; December 2003

Pasminco Port Pirie Smelter Financials for AMC visit; 15 December 2003

Pasminco Port Pirie Smelter Summary of Operations for AMC visit; 15 December 2003

Pirie Technology Change Opportunity .doc; Pasminco Ltd; 19 November 2003

Port Pirie residue and intermediate stockpile tonnages

Pasminco Port Pirie Smelter FY2004 Capital Plan; Rev v.15; 10 December 2003

Pasminco Port Pirie Smelter Site Overview for AMC visit; December 2003

Pasminco Port Pirie Smelter Financials for AMC visit; 15 December 2003

Pasminco Port Pirie Smelter: Operational Plans; December 2003

Pasminco Port Pirie Smelter Summary of Operations for AMC visit; 15 December 2003

Pasminco Port Pirie Smelter: Zinc department; December 2003

Port Pirie Smelter FY2004 Capital Plan – Presentation to AMC; 15 December 2003

Reconciliation F2002 Actuals to F2003 Plan; Port Pirie Smelter; 2002.

Reconciliation for Port Pirie Smelter between Strategic Models V.081 and V.084; in Smelters Reconciliation v81_v84.xls; Pasminco Ltd; 27 January 2004

Silver, gold, copper and lead recovery summary; Port Pirie Smelter; 2002.

Year to date treatments – average assays – to 30 June 2002; Port Pirie Smelter; 2002.

Budel Zink Smelter

Actual physical and financial performance – Budel Years '02 and '03; Pasminco Ltd; 28 January 2004

Asset Overview - Budel .doc; Budel Zinc BV; 24 November 2003

Budel Capital with expansion; Strategic Model – Capital Listings –Budel Zink BV; 18 December 2003

Budel Jan [04] Forecast variances to [Sep 03] Plan .xls; Pasminco Ltd; 24 January 2004

Budel leach circuit post Century; Budel Zinc; 2002.

Budel Zinc BV; Presentation for AMC Visit; 29 October 2003

Capital expenditure and pro plan supporting schedule; Budel Zinc; 22 July 2002.

Century concentrate plan 2003-2005, 24 April 2002; Budel Zinc; 2002.

Experience in Century zinc treatment – Pasminco Budel Zink; Ref TE/02/082; 11 June 2002.

Financial Forecast – Plan 2002/3 – 2004/5; Budel Zinc; June 2002.

Het geohydrologisch beheerssysteem van Budelco BV: behandelen en beheren av groundwater (brochure); Budelco BV; 2000.

Het geohydrologisch beheerssysteem van Budelco BV: behandelen en beheren av groundwater (brochure); Budelco BV; 2000.

Maintenance & Engineering Department Maintenance Plan 2003-2007; Budel Zinc; 21 May 2002.

Overzicht 2002: BLP samenstelling per maand; Budel Zinc; 2002.

Pasminco Budel Zink. 3 Year Plan 2003-2005; 18 April 2002.

Pasminco Budel Zink Plan 2002/03; Budel Zinc; 27 August 2002.

Pasminco Budel Zink Plan 2002/03; version 3; 1 May 2002

Plan phase 3 Micro Control; Budel Zinc; 28 June 2002.

Plan phase 3 operational expenses; Budel Zinc; 23 July 2002.

Processing of oxides to enhance zinc production; Budel Zinc; Krouw J, Krowinkel J and Copini C; 2002.

Product specifications: BLP, copper cake, cobalt cake, sulphuric acid; Budel Zinc; 2002.

Raw materials plan 2003-2005; Budel Zinc; 26 April 2002.

Recovery of sulphides from sulfate-containing bleed streams using a biological process; *Lead-Zinc 2000*, TMS, Warrendale, 891-901; Copini CFM, Janssen GHR, Buisman CJN and Vellinga S, 2000.

Reconciliation for Budel Smelter between Strategic Models V.081 and V.084; in Smelters Reconciliation v81_v84.xls; Pasminco Ltd; 27 January 2004

Sales plan 2003-2005 Zinc acid BLP cadmium Cu cake Zn liquor; Budel Zinc; 24 April 2002.

Summary – operations sheet – electrolytic zinc plant – 2001/2002; Budel Zinc; 2002.

Clarksville Smelter

Actual physical and financial performance – Clarksville Years '02 and '03; Pasminco Ltd; 30 January 2004

AMC Presentation: HR Issues; Brinker. J; Pasminco Inc; 1 December 2003

Asset Overview – Clarksville .doc; Pasminco Ltd; 25 November 2003

Chart series of expenditure rates and unit costs at Clarksville 03-04; Pasminco Inc; December 2003

Clarksville refinery technical review, May 2000; Sinclair R and Newman M; 2000.

Clarksville Plan 2002-04, including financials, refinery assumptions, and KPIs; 2002.

Clarksville refinery, 3-yr Business Plan 02-04; IPSN 0001 Capital Listings – Century, Rosebery and Clarksville. xls; Pasminco Ltd; 18 December 2003

Commercial plan (preliminary); Pasminco US Operations; 25 April 2002.

Electrolytic zinc plant of Jersey Miniere Zinc Company; in *Lead-Zinc '80*, The, TMS, Warrendale, 124-143; Painter L; 1980.

Expansion .doc; Pasminco Ltd; 21 November 2003

Jersey Miniere Zinc: plant design and start-up; Engineering and Mining Journal, vol. 181, no.7, July, 65-88, Painter LA et al, 1980.

Gallium and gallium compounds, in *Ullmann's Encyclopedia of Industrial Chemistry*; 5th ed, 163-167; Greber JF; 1989.

Gallium; in *Minerals Yearbook*; USGS, Washington; 29.1-29.9; Kramer DA, January 2001.

Gallium, *Mineral Commodity Summaries*, USGS, Washington, January, Kramer DA, 2002.

Key issues (Capital Maintenance); Colclasure. H; Pasminco Inc; December 2003

Kirk-Othmer Encyclopaedia of Chemical Technology; 4th ed; Wiley, New York; vol. 12, 299-317; Sabot JL and Lauvray H; 1994.

Major Roaster/Acid Equipment Expected Lifetimes; Longton R; Pasminco Inc; December 2003

Management Presentation to AMC at Clarksville 1 Dec 2003; Pasminco Inc.

Maintenance Department Business Improvement; Colclasure. H; Pasminco Inc; December 2003

Monthly management reports July 2001-June 2002; Clarksville; 2002.

Pasminco Clarksville Metallurgical balance – metric units; by months, July 2001 – June 2002; 2002.

Pasminco Clarksville Zinc Plant Business Plan 2003-2005, 2002.

Planned Concentrates Inventory Dec '03 to Jun '04; Pasminco Inc; December 2003

Potential Capital Projects – Clarksville; Pasminco Inc; December 2003

Productivity at Savage Zinc; in *Zinc and Lead Processing*, CIM, Montreal 471-483; Longton RJ; 1998.

Raw Materials Availability for CY 04; Strader. K; Pasminco Inc; December 2003

The recovery of gallium within the Pasminco US operations group; Pasminco US Operations discussion note; c.2002.

Treatment of Century Concentrate; Gum. K and Boyd. E; Pasminco Inc; December 2003

State and USEPA Inspections and Residue Management Issues; Filson. M; Pasminco Inc; December 2003

US Operations: Raw materials; Strader. K; Pasminco Inc; 2 December 2003

US operations strategy discussion paper; McFarlane M et al; August 2002.\

APPENDIX B List of Consultants

AMC Employees

GR Appleyard BSc (Hons), BA, FAusIMM, (CP), MCIM; More than 40 years experience in the mineral industry. He oversaw management of this project and the preparation of the report, reviewed the geology and resources sections for Century in the final report and contributed comments on Dugald River.

DP Carville, BSc Geology, MAusIMM, MGSA; 23 years experience in exploration and resource geology, particularly resource estimation. He reviewed the geology aspects of Century for the 2003 draft report.

PC Fisher B Eng (Minerals), MAusIMM, ASMB; Has over 20 years of diverse experience in business evaluation of large mining and industrial mining projects. He was the Project Manager for AMC's February 2003 draft report.

PL McCarthy, MGeosc, BSc (Eng), FAusIMM (CP), MIEAust (CP), MAIME; Has over 30 years experience in mine planning, feasibility studies, technical assessments and valuations. With P. Stephenson he peer reviewed the report.

PR Stephenson, BSc Geology, FAusIMM (CP), FAIG, MMICA, MCIM; Has over 30 years experience in mining and exploration geology, particularly Mineral Resource / Ore Reserve auditing and review. He reviewed the geology aspects of Rosebery and with P. McCarthy peer reviewed the report.

MJ Thomas, Higher National Diploma of Mining Engineering, MAusIMM (CP), Has 33 years experience in managing operating mines, both in Australia and overseas, in leading feasibility studies and in carrying out technical reviews, audits and valuations. He was team leader and carried out the mining engineering review for Century for the final report.

TP Horsley, BSc (Hons) – Mining Engineering, CEng, MIMMM, MAusIMM. Has more than 25 years experience in all aspects of mine planning and design from primary infrastructure to detailed stope and development design, feasibility study through to new mine development, production and mine closure. He was team leader and carried out the mining engineering review for Rosebery for the final report.

Sub-Consultants

HJ Boughen, BE (Met), BA, FAusIMM (CP); Over 35 years experience in minerals processing, particularly base metal grinding and flotation. He reviewed the processing aspects of Rosebery.

GA Buckett, AWASM, B Com, MAusIMM, MIEAust; Over 40 years experience in the engineering and mining industry, particularly project management and evaluation. He reviewed cost estimates and prepared economic models.

RA Cantrell, BSc Metallurgy, MSc Minerals Engineering, FAusIMM, MMICA, MIMM, MAIME; Over 30 years experience in minerals processing, particularly base metal flotation. He reviewed the processing aspects of Century.

RM Grant, BE Metallurgical, PhD, FAusIMM, CPMet, MCIM, MTMS; Has 32 years experience in extractive metallurgy, particularly zinc, lead, copper and nickel smelting and refining. He reviewed all the smelters.

CL Smith, Dip Mining, WASM, FAusIMM; Over 40 years experience in the minerals industry in operations, general management and consulting, particularly gold, zinc, lead, iron ore and uranium. He reviewed the mining aspects of Century and Rosebery for the 2003 draft report.

Note: Not all sub-consultants could be listed because of absence at the time of the consent process.

APPENDIX C Technical Glossary

GEOLOGICAL, MINING AND GENERAL PROCESS TERMINOLOGY

AAS:	Atomic Absorption Spectrometry, a method of analysis.
Acid digestion:	Refers to an assay technique in which the sample is dissolved in strong acid prior to analysis of its metal content.
Adit:	A horizontal opening into a mine, started from a hillside.
Altered, alteration:	Referring to physical or chemical change in a rock or mineral subsequent to its formation.
Anticline, antiformal:	A part of a fold system forming an arch ie convex upwards.
Antimony:	A metallic element, often a pathfinder element for gold.
Arsenopyrite:	An arsenic iron sulphide mineral.
Assay:	Test to determine the content of various chemical elements in a sample
Backfill:	Material used to fill mined-out stope voids.
Ball Mill:	A rotating cylindrical mill using iron balls to reduce broken ore to powder to assist the release of constituent minerals.
Base Metal:	Non precious metal, usually refers to copper, lead, zinc.
Batter & berms:	Technical terms for the components of a final pit wall. The slope batters are typically 10-20m high vertically and have slopes between 40^{o} and 70^{o}. The horizontal berms between the batters are typically 5-10m wide.
Bedding:	A surface in sedimentary or volcanic rocks that was a depositional surface when the sediments or volcanics were deposited.
Bio-oxidation (Bacterial oxidation):	A process utilising thiobacillus ferroxidans or similar bacteria to oxidise pyritic sulphides in acidic conditions.
Block model:	The term applied to the final output of a computer-based process to reflect the likely configuration of the mineralisation and the surrounding material.
Breccia:	A rock composed of angular fragments of rock embedded in a matrix.
Bulk density:	The in situ mass of a unit volume of material, normally expressed as tonnes per cubic metre.
Cambrian:	A geological time period from 530 to 460 million years ago.
Carbonaceous mudstone or shale:	A fine grained, dark coloured sedimentary rock containing organic material.
Carbonate:	Minerals containing calcium and/or magnesium carbonate.
Cathode:	The negatively charged component of an electrowinning cell, where valuable metals are deposited.
Chalcopyrite:	A copper iron sulphide mineral
Channel sampling:	Chip samples taken in a representative channel across the mineralisation.
Chert:	A cryptocrystalline siliceous rock usually of sedimentary origin.
Chlorite:	A green platey iron-magnesium rich silicate mineral.
Concentrates:	The product of a treatment plant in which the abundance of specific mineral species is higher than in the ore.
Cale Silicate:	A metamorphic rock composed mainly of various calcium and/or magnesium silicate minerals.

Competent Person	Defined in the 1999 JORC Code as a Member or Fellow of The Australasian Institute of Mining and Metallurgy and/or the Australian Institute of Geoscientists with a minimum of five years experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which that person is undertaking. If the Competent Person is estimating, or supervising the estimation of Mineral Resources, the relevant experience must be in the estimation, assessment and evaluation of Mineral Resources. If the Competent Person is estimating, or supervising the estimation of Ore Reserves, the relevant experience must be in the estimation, assessment, evaluation and economic extraction of Ore Reserves
Core recovery:	The proportion of the drilled rock column recovered as core in core drilling.
Core:	Cylinder of rock recovered from diamond drilling.
Crushing:	The reduction in size of ore from the mine to a size suitable for grinding in a mill-usually minus 12 mm size.
Cut and fill:	A stoping method in which the ore is excavated by successive flat or inclined slices working upward. Ore is extracted and the stope void is backfilled progressively to provide a working floor.
Cut or top cut:	The statistical process of reducing all higher-grade assay values to an acceptable level for the purposes of determining the average grade of a mineral deposit or drill intersection.
Cut-off grade:	The grade at or above which material is treated as ore, and below which it is treated as waste.
Cyclone:	Equipment for separating course and fine particles by centrifugal force.
Decline:	A tunnel access to an orebody, inclined downward from the surface.
Development:	Mining carried out to gain access to ore.
Devonian:	A geological time period from 395 to 345 million years ago.
Diamond drilling:	Method of obtaining a cylindrical core of rock by drilling with a diamond impregnated bit.
Dilution:	Reduction of ore grade by contamination with waste material.
Dip:	The angle at which layered rocks, foliation, a fault, or other planar structures, are inclined from the horizontal.
Discordant:	Cutting pre-existing structures.
Disseminated:	Mineralisation distributed throughout a rock.
Dolomite:	A calcium magnesium carbonate mineral.
Dome:	A form of anticlinal folding about more than one axis so that its form is dome like rather than arch like.
Drilling and blasting:	The process required in most mines to fragment the material so it can be excavated efficiently.
Excavator:	Open pit mining machine that mines by digging, lifting and dumping bucket loads of material into a truck; generally articulated by hydraulics.
Fault:	A fracture in rocks along which rocks on one side have been moved relative to the rocks on the other.
Feasibility study (bankable):	A comprehensive technical and economic study of a project of sufficient accuracy to provide the basis for a decision concerning financing.
Feldspar (felspar):	A very abundant group of rock-forming silicate minerals in which calcium, sodium and potassium are in combination with aluminium.
Gamma logging:	Down hole geophysical technique for measuring relative density.
Fire assay:	A method for assaying in which gold in a pulverised sample is amalgamated with lead, the latter subsequently being fumed off to leave the gold.
Footwall:	The underlying side of a geological feature or mine opening.
Galena:	Lead sulphide mineral.

Geochemical:	Prospecting techniques which measure the content of certain metals in soils and rocks and define anomalies for further testing.
Geophysical:	Prospecting techniques which measure the physical properties (magnetism, conductivity, density etc) of rocks and define anomalies for further testing.
Geostatistical resource estimation method:	A computer based methodology wherein particular mathematical relationships between sample points are established and employed to project the influence of the sample points.
Geotechnical:	Referring to the physical behaviour of rock under stress.
Grade control:	A general term which describes the many measures required to maximise mining recovery of the valuable mineral whilst minimising dilution.
Grade:	Quantity of metal per unit weight of host rock.
Granite:	A coarse grained igneous rock consisting largely of quartz and feldspar.
Grid:	Rectangular pattern marked on ground, usually with wooden pegs, to provide reference points for exploration observations and measurements.
Grinding:	Size reduction to relatively fine particles.
Hangingwall:	The wall or rock on the topside of a geological feature or mine opening.
Head grades:	A general term referring to the grade of ore delivered to the processing plant.
Indicated Resource:	Defined in the 1999 JORC Code as that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.
Inferred Resource:	Defined in the 1999 JORC Code as that part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability.
Inverse distance squared (cubed):	A method of projecting grades into a block model in which the weighting of any nearby sample is inversely proportional to the square (cube) of its distance from the block being estimated.
Jarosite:	An iron sulphate mineral often formed as zinc smelter waste.
JORC, JORC Code	Joint Ore Reserves Committee, common reference to the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves, 1999.
Jumbo:	A development drill rig.
Knelson concentrator:	Device for separating gold particles by centrifugal force.
Kriging:	A geostatistical means of projecting grades into resource blocks from a range of sample points.
Level:	A main underground roadway or passage.
Limestone:	A sedimentary rock consisting chiefly of calcium carbonate mainly as calcite.
Massive sulphide:	Body of mineralisation comprised mainly of sulphide minerals.
Measured Resource:	Defined in the 1999 JORC Code as that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and/or grade continuity.

Metamorphism, Metamorphic:	Term applied to pre-existing sedimentary and igneous rocks which have been altered in composition, texture, or internal structure by processes involving pressure, heat and/or the introduction of new chemical substances.
Mineral Resource	Defined in the 1999 JORC Code as a concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories
Mill:	A rotating machine used for reducing the size of ore particles.
Mineralisation:	The process by which minerals are introduced into a rock. More generally a term applied to accumulations of economic or related minerals in quantities ranging from anomalous to economically recoverable.
Mucking:	Removal of ore and/or waste using a front end loader.
Mudstone:	A fine, more or less sandy, clayey rock.
Open pit:	Mine excavation produced by removing all material overlying and including the extracted ore. No underground caverns are created.
Ordovician:	A geological time period from 460 to 435 million years ago.
Ore:	Mineral bearing rock which can be mined and treated profitably under current or immediately foreseeable economic conditions.
Ore Reserve	Defined in the 1999 JORC Code as the economically mineable part of a Measured or Indicated Mineral Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves.
Orebody:	A physically discrete body of rock comprising ore.
Ounce:	Troy ounce of 31.1 grams.
Outcrop:	Expression of rock unit at surface.
Oxidation:	The process by which minerals are altered by the addition of oxygen in the crystal structures.
Oxide ore:	Ore that has been oxidised by exposure to air and circulating groundwaters. During this process, sulphide minerals break down to iron and other metal oxide minerals.
Palaeozoic:	A geological era from 570 to 225 million years ago.
Percussion drilling:	Drilling method which utilises a hammering action under rotation to penetrate rock while the cuttings are forced to the surface by compressed air.
Pillar (crown, rib):	Rock left in situ around mine openings for support.
Plunge:	The angle from the horizontal of a geological feature viewed in a vertical plane parallel to its strike.
Polygons, polygonal:	The derived shape of the mineralisation on a particular cross-section which provides the basis for projecting the mineralisation to the next section and thus establishing the tonnage.
Porphyry, porphyritic:	A rock composed of relatively large mineral grains (phenocrysts) in a fine-grained groundmass.
Portal:	The entrance to a tunnel or decline.
Precious metals:	Generally refers to gold and silver.

Pre-feasibility study:	A relatively comprehensive analysis which is qualified by the availability and accuracy of fundamental criteria and assumptions to the degree that it cannot be the basis for final decisions.
Pre-stripping:	Removal of waste rock before mining of ore in an open pit.
Probable Reserve:	Defined in the 1999 JORC Code as the economically mineable part of an Indicated, and in some circumstances Measured, Mineral Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified.
Proterozoic:	A geological era from 2,400 million years to 570 million years.
Proved Reserve:	Defined in the 1999 JORC Code as the economically mineable part of a Measured Mineral Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified.
Pyrite:	An iron sulphide mineral.
Pyrometallurgical:	Processes for wining and refining metals using heat, as in roasting and smelting.
Pyrrhotite:	Magnetic iron sulphide mineral.
Quartz:	Mineral species composed of crystalline silica (SiO_2).
Quartzite:	A metasedimentary rock derived from sandstone.
Reagents:	Chemicals used in the treatment of ores to recover metals.
Recovery:	The percentage of metal in an ore extracted by the metallurgical process.
Reverse circulation (RC) drilling:	Variant of percussion drilling in which cuttings are raised to surface by a stream of compressed air inside a metal tube.
ROM stockpile:	Stockpile of "run of mine" ore which provides a buffer, for various reasons, between the mining and crushing operations.
Room and pillar:	An underground mining method.
SAG mill:	Semi-autogenous grinding ball mill in which the rock being ground assists in the grinding process.
Sandstone:	A medium grained sedimentary rock with a high content of quartz.
Schist:	Fine grained micaceous metamorphic rock with laminated fabric.
Screened fire assay:	Fire assaying of a sample after it has been divided into separate size fractions, aimed at ensuring a representative proportion of the coarser metal (usually gold) grains in the assay sample.
Sedimentary:	Rocks formed of particles deposited from suspension in water, wind or ice.
Sericite:	A member of the mica mineral group; an aluminium silicate often derived from alteration
Shaft:	A nearly vertical passage from the surface by which a mine is entered and through which ore is transported.
Shale:	Mudstone or claystone with very thin fissile bedding.
Shear:	Zone in which rocks have been deformed by lateral movement along parallel planes.
Siderite:	An iron carbonate mineral.
Siltstone:	A fine-grained sedimentary rock.
Slag:	Waste product of a smelter.

Slate:	A fine-grained fissile metamorphic rock derived from shales and similar sediments.
Smelting:	Chemical reduction of a metal from its ore by fusion.
Sphalerite:	A zinc sulphide mineral.
Split sets:	Tubular steel ground support.
Stope:	An underground opening from which ore is extracted.
Stratiform:	Parallel to sedimentary bedding.
Stratigraphy:	Refers to the classification of a series of layered rock or strata.
Strike:	The direction of bearing of a bed or layer of rock in the horizontal plane.
Stripping:	Removal of metal from material on which it has precipitated or been adsorbed e.g. gold from carbon or copper from cathodes.
Structural:	In this report refers to processes of fracturing and folding of rocks.
Sulphides:	Minerals consisting of a chemical combination of sulphur with metals.
Sulphide concentrate:	The product, usually of the flotation process, in which sulphide particles are removed from the crushed rock, containing predominantly sulphide minerals.
Syncline:	A fold in rock strata which is concave upwards.
Tailings:	Material rejected from a treatment plant after the recoverable valuable minerals have been extracted.
Thickener:	Apparatus for reducing the proportion of water in a pulp.
Thrust:	A low angle fault.
Top cut:	An upper assay limit to which all abnormally high assays in a population are reduced to restrict their influence on the average grade of the resource.
True thickness:	The thickness of a lens or shoot normal to its plane of maximum elongation as opposed to the thickness indicated by a drill hole intercept which may cut the lens obliquely giving a large apparent thickness.
Tuffaceous sandstone or siltstone:	Indurated sedimentary rock composed of sand grains derived from explosive volcanic activity.
Unconformity:	A contact between rock units that represents a time break in rock deposition or formation.
Underground methods:	Methods used for underground mining as opposed to open pit methods.
Uphole benching; Uphole retreating:	A method of mechanised open stope underground mining in which the ore is drilled and blasted from below.
Vein:	A tabular form mineral filling of a rock fracture.
Ventilation raise:	An opening drilled upwards to surface to provide mine ventilation.
Volcanic:	Rocks formed from the solidification of lava extruded on or erupted at the Earth's surface. Also includes pyroclastic rocks.
Waste to ore (stripping) ratio:	Tonnage/volume of waste material which must be removed to allow the mining of one tonne/cubic metre of ore in an open cut.
Waste:	Rock other than ore excavated during a mining operation.
Weathering:	Near-surface alteration of minerals and rocks by exposure to the atmosphere and groundwater.
Wedge:	A section of diamond drill-hole mechanically deviated from the direction of the primary hole.
Whittle 3D (4D) optimisation:	Computer program used for planning open-pit dimensions based on technical and economic parameters relevant to resource under study.
Winder:	An electrically driven winding engine for hoisting up a shaft.
Wire frame model:	Computer model of a 2 or 3 dimensional surface.
Workings:	Refers to pits, shafts and adits mark by prospectors in search of minerals.

SPECIFIC PROCESS AND SMELTER TERMINOLOGY AND ABBREVIATIONS

Products made at the smelters	
CGG:	Continuous Galvanizing Grade zinc; contains alloying agents such as aluminium, lead and selenium in specific qualities desired by customers; used in continuous strip galvanising plants.
EZDA:	Proprietary zinc die casting alloy made at the Hobart smelter; the alloy contains aluminium and magnesium.
HG:	High Grade Zinc; minimum 99.95% zinc, intermediate grade, may be used in blends for CG alloys.
SHG:	Special High Grade Zinc; minimum 99.995% zinc; premium quality, used by diecasters; traded on the LME; attracts a price margin over lower grades.
VRLA:	Lead alloy for Valve Regulated Lead Acid battery.
Smelter terminology	
A/m^2	Amperes per square meter
Alloy:	Metal containing several components.
Anode:	Positively charged electrode in electrolysis; in zinc and cadmium electrolysis, the anode is a flat sheet of lead alloy containing typically 0.5% silver to stiffen the metal.
Basics:	Plant for precipitation of basic compounds (eg basic zinc sulphate) from spent electrolyte bleed at the Hobart smelter by addition of limestone with formation of gypsum; provides an outlet for soluble elements such as chlorine.
BATEA:	Best Available Technology Economically Achievable; requirement of an environmental protection authority to construct facilities to improve environmental performance of a site.
BF:	Blast Furnace; a tall shaft furnace used to smelt sinter and produce crude lead bullion and a slag.
BIP:	Business Improvement Program; uses a project team set up to identify opportunities for reducing operating costs at the smelter, evaluate and implement them.
BLP:	Budel Leach Product, a material produced at the Budel smelter containing mainly lead, silver, silica and iron compounds.
Bullion:	Crude metal that contains impurities; needs to be refined to make market metal.
Bund:	Containment around a tank; designed to catch all the tank contents on any failure; prevents environmental damage.
Busbar:	Large conductor of copper or aluminium used to distribute power to electrolysis cells.
Cake:	Moist solids product obtained by filtration of slurry; also known as filter cake.
Calcine:	Product of roasting zinc sulphide concentrates; mainly zinc oxide, also with silica and iron compounds, lead compounds, minor elements and residual combined sulphur.
Cathode:	Negatively charged electrode in electrolysis; in zinc and cadmium electrolysis, the cathode is a flat sheet of aluminium.
CDF:	Continuous Drossing Furnace at the Port Pirie smelter; removes copper and sulphur from blast furnace bullion, and separates them as a lead-copper sulphide matte.
Cement, cementation:	Process of recovering metals from solution through depositing them by adding zinc dust.
Concentrate:	Material produced from metalliferous ore by mineral processing or beneficiation; commonly based on sulphides of zinc, lead and copper.
Conversion Cost:	Operating cost for a smelter to produce market metal, not including the cost of raw

	materials, mainly concentrates.
Coke:	Product made by de-volatilisation of coal in the absence of air at high temperature.
Cupel:	Furnace used for oxidising lead-zinc-silver-gold bullion into doré.
Current efficiency (CE):	Measure of the efficiency of utilisation of the electrical current for metal deposition in electrolysis, compared with the theoretical maximum.
DCS:	Distributed Control System; computer control system for plant operations and control room displays in processing plants.
DLEW:	Direct Leach Electrowin; technology being evaluated for Century Mine as a way of increasing zinc recovery.
Doré:	Alloy of silver and gold that is electrolytically refined to make high-grade silver.
Dross:	Solid scum that forms on top of molten metals; must be removed for recycle.
EAF:	Electric Arc Furnace, widely used in steelmaking operations based upon scrap steel feed.
Electrolysis:	Process by which metals (here zinc, cadmium, and copper) are 'won' or deposited from solution onto a cathode by the passage of an electric current through the solution between anode and cathode.
Electrolyte:	Solution containing metals (here zinc, cadmium, copper and silver) circulating in an electrolysis cell.
Electrowinning:	See Electrolysis.
EPA:	Environment Protection Authority of a state, provincial or federal government.
ESP:	Electrostatic Precipitator; used to clean dust from roaster flue gases before the acid plant; may be dry or wet.
Ferrite:	Compound of the form $MO.Fe_2O_3$. See also Zinc ferrite.
Flotation:	Method of mineral concentration, usually of sulphide ores, by which valuable mineral particles adhere to froth bubbles for collection as a concentrate; waste particles remain in the slurry for eventual disposal as a tailing.
Flux, fluxes:	Additives to a feed mix made to produce a fluid slag in the furnace; typical fluxes are lime, silica and iron oxide.
Forehearth:	Refractory-lined box that receives molten metal and slag that are tapped together from a blast furnace; separates the phases into two streams.
Fuming, fume:	Process for recovery of zinc and lead values from molten lead blast furnace slag by injecting coal; the metals are removed as vapours in the gas stream, and are re-oxidised to form a fume that is collected.
Galvanising:	Process of coating steel sheet or fabricated products with a thin layer of zinc for corrosion protection.
Gangue:	The non-valuable minerals in an ore or concentrate; minerals usually based on oxides of silicon, iron, aluminium, magnesium, etc.
Goethite:	FeO.OH, a hydrated iron oxide; as a zinc production by-product it contains some zinc, lead, silver and other impurities.
Gypsum:	Calcium sulphate, hydrated.
HAL:	Hot Acid Leach.
Halide:	Group of elements including fluorine, chlorine and iodine.
Hearth:	Bottom part of a furnace where metal and slag are contained; in fluidised bed roasters, the bottom deck through which air enters.
HLP1:	Hobart Leach Product No 1, a material containing lead, silver and zinc values; sometimes termed PLR.
HLP2:	Hobart Leach Product No 2, a high lead product from the strong acid leach stage;

	also known as LSLC.
HSE:	Health, safety and environment.
Hydrometallurgy:	Extractive metallurgy - the production of metals from ores or concentrates – based on use of aqueous liquids such as acids and alkalis at comparatively low temperatures.
Induction furnace:	Furnace that heats metals without fuel combustion; the metal is heated by an electromagnetic field created by electrical windings or inductors.
Ion exchange:	Method used in hydrometallurgy for metal recovery and/or purification; metal(s) in ionic form are transferred to and from a selective resin.
ISF	Imperial Smelting Furnace
Jarosite:	Complex iron sulphate with sodium, potassium, ammonium etc; as a residue from zinc production it contains some zinc, lead and other impurities.
Liquation:	Process of melting a metallic material at controlled temperature, to separate the material into two liquid layers.
LSLC:	Lead Sulphate Leach Concentrate; same as SLR or HLP2.
LTIFR:	Lost Time Injury Frequency Rate per million man-hours.
Matte:	Mixed sulphide compound produced in a furnace; at the Port Pirie smelter matte is a lead-copper-sulphur material.
MRIFR:	Medically Referred Injury Frequency Rate per million man hours.
n.a and n/a:	Not applicable.
Neutral Leach (NL):	Leach stage using very low acidity; provides feed solution for purification.
NO_x:	Nitrogen oxides; may create a brown plume from a stack discharge unless controlled.
NPI:	National Pollutant Inventory; reporting of emissions to the public.
O:	Chemical symbol for oxygen.
PETS:	Process Effluent Treatment System at the Port Pirie smelter; treats acid plant blowdown liquor, runoff and wastewaters from plant.
PG, PGP:	Paragoethite Product, made at the Hobart smelter.
Paragoethite:	Form of goethite made as a by-product of zinc production, so named since the process differs from the normal 'goethite process'.
Paraliner:	A tough, long-lasting plastic lining used in concrete electrolysis cells.
pH:	Measure of the acidity of a solution; neutral is 7; the lower the pH below 7 the more acidic is the solution; the higher the pH above 7 the more alkaline it is.
PLR:	Primary Leach Residue; produced at the Hobart smelter; used to be called Hobart Leach Product No 1; pre-jarosite material; being reprocessed at the Port Pirie smelter for recovery of metal values.
Pre-neutralisation:	A leaching process stage in which the high acidity present after a 'strong' leach is partially reduced by addition of calcine.
Pyrometallurgy:	Extractive metallurgy – the production of metals from ores and concentrates – based on use of high temperature furnaces.
RCRA:	Resource Conservation and Recovery Act (United States).
Rectiformer:	Combination of high-voltage transformer and rectifier, to produce direct-current power for electrolysis.
Reflux:	In zinc refining, process of separation of volatile from non- or less volatile metal by multiple stages of distillation.
RLE	Roast Leach Electrowin; technology used at the Hobart, Budel and Clarksville smelters for zinc smelting.
Roaster:	In zinc production, a fluid-bed furnace used to oxidise zinc sulphide concentrates;

	operates typically at 930-970°C; air injected through the furnace bottom 'fluidises' the bed of fine combusting solids.
SAL:	Strong Acid Leach; final fourth stage of leaching at the Hobart smelter; SLR is produced from this step.
SiHAL:	Silica Hot Acid Leach; used at the Budel smelter to take silica and iron in calcine into solution.
Sinter:	A hard, porous, agglomerated intermediate material made by oxidation at moderately high temperature of sulphide concentrates, fluxes and returns on a grate conveyor termed a sinter machine.
SLM:	Straight Line Moulding machine; used to cast refined lead into 25 kg market ingots.
SLR:	Silver Lead Residue; residue after Hot High Acid leach at the Hobart smelter; same as LSLC and HLP.
Slag:	Mixture of oxides produced in molten form in a furnace at high temperature.
Slurry:	Suspension of finely divided solids in a liquid, usually aqueous.
Softening:	Oxidation process that removed arsenic and antimony from lead bullion; so named as arsenic and antimony make lead into a hard alloy.
Solvent extraction:	Method used in hydrometallurgy for metal recovery and/or purification; metal(s) are transferred to and from a selective organic liquid that is dissolved in a type of kerosene.
Spent electrolyte:	Electrolyte discharged from the electrolysis cells; compared with the feed electrolyte, the solution has a lower level of the metal being electrowon (i.e. zinc, copper) and correspondingly elevated acid level.
Speiss:	Intermetallic compound containing arsenic; at the Port Pirie smelter, speiss is an iron-arsenic compound.
Sponge:	Sponge-like agglomeration of a metal precipitate.
SRB:	Sulphate Reducing Bacteria plant; treatment of waters pumped up from under residue dams at Budel, as well as current arisings of bleed liquors; heavy metals and sulphur are precipitated out and returned to the roaster; clean waste water is sent to drain.
TCLP:	Toxicity Characteristic Leach Procedure Test; used by some EPAs as a guide to the potential for leaching of toxic metals from residues when exposed to groundwaters.
Tippler:	Device for emptying rail wagons by tipping them over
TML:	Transportable Moisture Limit; safe upper limit of moisture in materials shipped.
Trommel:	Rotating steel cylinder made from punched plate or heavy screen wire; used to contact zinc contained inside the trommel with cadmium-bearing solution.
Tuyere:	Pipe through which blast air is injected into a furnace; usually many tuyeres are used on the one furnace.
SiHAL:	Silica Hot Acid Leach; used at Budel to take silica and iron in calcine derived from Century concentrate into solution.
µg/dL	Micrograms per deciliter; the standard units for reporting levels of lead in blood.
WAL:	Weak Acid Leach.
WHB:	Waste Heat Boiler; heat recovery as steam from roaster flue gases; used to generate power or for process heat in smelter.
Zinc ferrite:	ZnO. Fe_2O_3 or $ZnFe_2O_4$.

ABBREVIATIONS - GENERAL

Ag	chemical symbol for silver
As	chemical symbol for arsenic
BCM	bank cubic metre
cm	centimetre
Co	chemical symbol for cobalt
Cu	chemical symbol for copper
EL	Exploration Licence
Fe	chemical symbol for iron
FOB	free on board – at point of shipment
g/L	grams per litre
g/t	grams per tonne
Ha	hectares.
HQ	standard diamond drill core diameter, 63.5 mm
kg	kilogram
km	kilometre
km^2	square kilometre
kPa	kilopascal
kV	kilovolt
kW	kilowatt
kWh	kilowatt hour
l	litre
LHD	load, haul, dump
LME	London Metal Exchange
LOM	Life of Mine
m	metre
M	million
m^3	cubic metre
mg/L	milligrams per litre
mg/m^3	milligrams per cubic metre
ML	Mining Lease
mm	millimetre
Mn	chemical symbol for manganese
Mt	million tonnes
Mtpa	million tonnes per annum
MW	megawatt
n.a and n/a	not applicable
NPV	Net Present Value, the present value of discounted cash flows
NQ	standard diamond drill core diameter, 47.6 mm
oz	troy ounce
OHS	Occupational Health and Safety
pa	per annum
Pb	chemical symbol for lead
ppb	parts per billion
ppm	parts per million (equivalent to g/t)
QA/QC	quality assurance/quality control
RAB	rotary air blast drilling
RC	reverse circulation drilling
RL	reduced level or relative level
Sb	chemical symbol for antimony
SiO_2	chemical symbol for silicon dioxide (quartz)
t	tonne
tpa	tonnes per annum
tph	tonnes per hour

W:O	waste to ore ratio
YTD	year to date
Zn	chemical symbol for zinc
Zn Eq	A value expression in which the content of zinc and metals associated with zinc is expressed so as to reflect value if all the metals were zinc

Zinifex Limited

(ABN 29 101 657 309)

Offering of 500,000,000 Ordinary Shares

INSTITUTIONAL OFFERING MEMORANDUM

Joint Lead Managers

Citigroup **Deutsche Bank** **UBS Investment Bank**

2004